

**CALL NO. 206** 

**CONTRACT ID. 151224** 

**MAGOFFIN - BREATHITT COUNTIES** 

FED/STATE PROJECT NUMBER STPE 6000 (031)

DESCRIPTION DAWKINS TRAIL PHASE 3: CARVER TUNNEL (MAGOFFIN &

**BREATHITT**)

WORK TYPE TUNNELS

PRIMARY COMPLETION DATE 2/29/2016

LETTING DATE: May 29,2015

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME May 29,2015. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

**DBE CERTIFICATION REQUIRED - 2%** 

**REQUIRED BID PROPOSAL GUARANTY:** Not less than 5% of the total bid.

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**SCOPE OF WORK** 

## **ADMINISTRATIVE DISTRICT - 10**

**CONTRACT ID - 151224** 

STPE 6000 (031)

**COUNTY - BREATHITT** 

PCN - DE017DAWK1524 STPE 6000 (031)

CARVER TUNNEL (BREATHITT COUNTY) (MP 25.100) DAWKINS TRAIL PHASE 3: CARVER TUNNEL REHAB & LIGHTING IN BREATHITT COUNTY (MP 25.800), A DISTANCE OF 0.70 MILES.TUNNELS SYP NO. 12-03011.50. GEOGRAPHIC COORDINATES LATITUDE 37:36:30.30 LONGITUDE 83:03:41.80

**COUNTY - MAGOFFIN** 

PCN - DE077DAWK1524 STPE 6000 (031)

CARVER TUNNEL (MAGOFFIN COUNTY) (MP 25.100) DAWKINS TRAIL PHASE 3: CARVER TUNNEL REHAB & LIGHTING IN MAGOFFIN COUNTY (MP 25.800), A DISTANCE OF 0.70 MILES.TUNNELS SYP NO. 12-03011.50. GEOGRAPHIC COORDINATES LATITUDE 37:36:30.30 LONGITUDE 83:03:40.80

## **COMPLETION DATE(S):**

COMPLETED BY 02/29/2016

APPLIES TO ENTIRE CONTRACT

## **CONTRACT NOTES**

## PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

## **BID SUBMITTAL**

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

## JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

## UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

## SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2012 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

## <u>REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN</u> <u>ENTITY</u>

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx.

## SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to <a href="mailto-kytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (<a href="www.transportation.ky.gov/contract">www.transportation.ky.gov/contract</a>). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

## HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer.

Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

## INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

## **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004. (See attachment)

10/29/12



Steven L. Beshear Governor Finance and Administration Cabinet
OFFICE OF THE SECRETARY

Room 383, Capitol Annex

702 Capital Avenue Frankfort, KY 40601-3462 (502) 564-4240 Fax (502) 564-6785 **Lori H. Flanery** Secretary

#### **SECRETARY'S ORDER 11-004**

#### FINANCE AND ADMINISTRATION CABINET

#### **Vendor Document Disclosure**

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary to conduct a review of the records of a private vendor that holds a contract to provide goods and/or services to the Commonwealth; and

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary during the course of an audit, investigation or any other inquiry by an Executive Branch agency that involves the review of documents; and

WHEREAS, KRS 42.014 and KRS 12.270 authorizes the Secretary of the Finance and Administration Cabinet to establish the internal organization and assignment of functions which are not established by statute relating to the Finance and Administration Cabinet; further, KRS Chapter 45A.050 and 45A.230 authorizes the Secretary of the Finance and Administration Cabinet to procure, manage and control all supplies and services that are procured by the Commonwealth and to intervene in controversies among vendors and state agencies; and

**NOW, THEREFORE**, pursuant to the authority vested in me by KRS 42.014, KRS 12.270, KRS 45A.050, and 45A.230, I, Lori H. Flanery, Secretary of the Finance and Administration Cabinet, do hereby order and direct the following:

- I. Upon the request of an Executive Branch agency, the Finance and Administration Cabinet ("FAC") shall formally review any dispute arising where the agency has requested documents from a private vendor that holds a state contract and the vendor has refused access to said documents under a claim that said documents are not directly pertinent or relevant to the agency's inquiry upon which the document request was predicated.
- II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to



- conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.
- III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.
- IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.
- V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

## FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals

102.08 Irregular Proposals 102.14 Disqualification of Bidders

102.09 Proposal Guaranty

## **CIVIL RIGHTS ACT OF 1964**

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

## NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

## SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

## DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet ("the Cabinet") that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

## DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

## **OBLIGATION OF CONTRACTORS**

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

## **CERTIFICATION OF CONTRACT GOAL**

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

"The bidder certifies that it has secured participation by Disadvantaged Business Enterprises ("DBE") in the amount of \_\_\_\_\_ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program."

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

## **DBE PARTICIPATION PLAN**

Lowest responsive bidders must submit the *DBE Plan/Subcontractor Request*, form TC 63-35 DBE, within 7 days of the letting. This is necessary before the Awards Committee will review and make a recommendation. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Plan/Subcontractor Request.

The DBE Participation Plan shall include the following:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
- The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
  - The entire expenditure paid to a DBE manufacturer;
  - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to

- the public, maintain an inventory and own and operate distribution equipment; and
- The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.
- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

## UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

## CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- 9 Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the

work requirements of the bid proposal; and

Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

## FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

## SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

## **PROMPT PAYMENT**

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

## **CONTRACTOR REPORTING**

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to submit certified reports on monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These reports must be submitted within 14 days of payment made to the DBE contractor.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at: http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.

Photocopied payments and completed form to be submitted to: Office of Civil Rights and Small Business Development 6 Floor West 200 Mero Street Frankfort, KY 40622

## **DEFAULT OR DECERTIFICATION OF THE DBE**

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

04/29/2015

MAGOFFIN - BREATHITT COUNTIES STPE 6000 (031)

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## ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

#### **DGA BASE**

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

#### INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

#### SPECIAL NOTE A FOR MOBILIZATION AND SITE COORDINATION

This special note applies to procedures, not otherwise stated in the Standard Specifications, to be implemented regarding mobilization and necessary site coordination for the Carver Tunnel component of the Dawkins Trail project.

#### PART 1 - GENERAL

#### 1.1 SCOPE

A. Work includes: providing labor, materials, equipment and incidentals to mobilize all necessary personnel and equipment to the project site at the start of the project and demobilize all personnel and equipment from the project site at the conclusion of the project. The work also includes any necessary coordination with the primary Dawkins Trail contractor and other necessary coordination with the Department and Engineer.

#### 1.2 SUBMITTALS

A. Within 30 days of receiving Notice to Proceed and no later than 7 days prior to starting any work covered by Special Notes B through F, submit a Work Plan that describes the methodology and sequence for completing the work required for the Carver Tunnel as specified in this Special Note and in Special Notes B through F. Include descriptions of equipment and materials to be used. Coordinate with requirements of Standard Specifications Section 108.

#### 1.3 PROJECT MEETINGS

#### A. Preconstruction Meeting

- 1. Engineer will schedule a Preconstruction Meeting to be held no later than 14 days after issuance of Notice to Proceed (NTP). Department will determine the specific time, date and location of the meeting.
- 2. The conduct of the meeting will conform to Standard Specifications Section 108.

## B. Progress Meetings

1. Engineer will schedule progress meetings on an as-needed basis. Schedule updates shall be provided in conformance with Standard Specifications Section 108.

## C. Coordination Meetings

- 1. Contractor or Engineer will schedule meetings as required with parties or entities affected by the Work as necessary to discuss coordination needs or potential conflicts with trail construction contractor.
- 2. Attendees to include: Department representative(s); Engineer's representative(s); Contractor's Project Manager and Site Superintendent; any Subcontractor's representatives determined to be necessary; and representatives of other parties as determined appropriate by the Engineer or Department.
- D. Health and Safety Meetings: Schedule and hold health and safety meetings at the project site at a frequency and with topics consistent with Contractor's Health and Safety Plan.

#### **PART 2 - PRODUCTS**

#### 2.1 NOT USED

#### **PART 3 - EXECUTION**

#### 3.1 MOBILIZATION

A. Conform to requirements of Standard Specifications Section 108.

#### 3.2 DELIVERIES, HAULING AND STORING

- A. Conform to requirements of Standard Specifications Section 108.
- B. Haul excess stone, if any; deleterious stone materials, such as coal, shale and underclay; and steel rib sections and associated components and hardware salvaged from the tunnel to off-site location(s) as determined by Contractor.
- C. Conform to Standard Specification requirements and applicable local, state or federal laws regarding hauling to or from site.

#### 3.3 SITE SECURITY

- A. Be fully responsible for security and safety of the project site and established staging areas and be in full control of such areas.
- B. Employ security measures for the project site as determined necessary to safeguard Contractor's equipment and any stored materials or supplies.
- C. Employ security measures as determined necessary to keep members of the public and any other non-authorized personnel out of the tunnel and out of any established staging areas. Employ additional measures as may be required to protect the public and the work during non-working hours.

## **PART 4 - MEASUREMENT**

4.1 The work of this Section shall be considered incidental to the project and no measurement will be made.

#### **PART 5 - PAYMENT**

5.1 The work of this Section shall be considered incidental to the project and no separate payment will be made. All costs associated with this Special Note shall be apportioned to specific bid items as stated in other Special Notes.

END OF SPECIAL NOTE A

#### SPECIAL NOTE B FOR TUNNEL HEALTH AND SAFETY

This special note applies to procedures to be implemented to ensure the health and safety of, or otherwise minimize the health and safety risk to, Contractor, Engineer or Department personnel working on or observing any aspect of the Carver Tunnel project.

#### **PART 1 - GENERAL**

#### 1.1 SCOPE

A. Work includes: providing labor, materials, equipment and incidentals to implement health and safety provisions specified in this or other sections of the Standard Specifications or Special Notes or as otherwise required by federal, state or local laws, ordinances or regulations.

#### 1.2 RESPONSIBILITY

- A. Be responsible for initiating, maintaining and supervising all necessary or required safety precautions and programs in connection with the Work. Take all necessary precautions for the safety of, and provide the necessary protection to prevent damage, injury or loss to:
  - 1. All project employees, including Contractor, Engineer and Department personnel, and
  - 2. All Work elements, including all materials to be incorporated therein.
- B. Comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for its safety and protection. Notify owners of adjacent utilities or properties when prosecution of the Work may affect them. All damage, injury or loss to any property caused directly or indirectly, in whole or in part, by Contractor, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by Contractor, except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of the Department or Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor. Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to the Department and Contractor that Work is acceptable.
- C. No Section or Special Note or description in the Contract Documents shall be construed to replace, modify or supersede requirements of any laws, ordinances, rules or regulations referenced throughout the Contract Documents. The more stringent provisions apply in the event of a conflict between any referenced laws, ordinances, rules or regulations and the Contract Documents.
- D. Be solely responsible for the safety of persons engaged on the project and maintain the sole liability for injuries to, or death of persons, or damage of property during the entire construction period.
- E. Have on hand at all times sufficient materials and equipment in good condition and in good working order for all emergencies that are likely to arise in order to secure the safety of all personnel and structures.
- F. Have a competent, OSHA-certified Safety Officer on the job with experience in the type of work to be performed on this project, with an appropriate office on the job site to maintain and keep available safety records and up-to-date copies of all pertinent safety rules and regulations and who will have responsibilities as follows:
  - 1. Ensure compliance with all applicable health and safety requirements of all governing legislation.
  - 2. Schedule and conduct safety meetings and safety training programs as required by law for all personnel engaged in the work.

- 3. Post all appropriate notices regarding safety and health regulations at locations that afford maximum exposure to all personnel at the job site.
- 4. Post the name, address, and hours of the nearest medical doctor; names and addresses of nearby clinics and hospitals; and the telephone numbers of the fire and police departments.
- 5. Post appropriate instructions and warning signs with regard to all hazardous areas or conditions.
- 6. Have proper safety and rescue equipment adequately maintained and readily available for any contingency. This equipment shall include such applicable items as: proper fire extinguishers, first aid kits, safety ropes and harnesses, stretcher, life savers, oxygen breathing apparatus, resuscitators, gas detectors, oxygen deficiency indicators, explosion meters, and any other equipment mandated by law.
- 7. Make inspections at least once daily in accordance with an inspection checklist report form to ensure that all machines, tools and equipment are in safe operating condition; that all work methods are not dangerous; and that all work methods are free of hazards.
- 8. Submit to the Engineer upon request copies of all inspection checklist report forms, safety records and all safety inspection reports and certifications from regulating agencies and insurance companies.
- 9. Notify Engineer of a serious accident immediately, followed by a detailed written report within twenty-four (24) hours. "Serious accident" is defined as that requiring an absence of work of more than 2 days or hospitalization.
- 10. Notify the Engineer immediately in the event of a fatal accident.
- 11. Notify Engineer of any accident claim against the Contractor or any Subcontractor immediately, followed up by a detailed written report on the claim and its resolution.
- 12. Review safety aspects of the Contractor's submittals as applicable.
- G. All personnel employed by the CONTRACTOR or his Subcontractors, whenever entering the job site, any shaft, or tunnel, shall be required to wear approved safety hats as well as protective clothing, footwear and other equipment as required by OSHA. The CONTRACTOR shall maintain, on site, a sufficient number of safety hats for the use of visitors.

#### 1.3 SUBMITTALS

- A. Safety Officer Submit a resume providing the qualifications of the Safety Officer at least 30 days prior to the start of any fieldwork. Include a description of the Safety Officer's experience, education, special safety and first aid courses completed and safety conferences attended.
- B. Health and Safety Plan 30 days prior to the commencement of site work, submit full health and safety plan in accordance with OSHA requirements. Plan shall address eventuality of tunnel and shaft evacuation procedure in the event of fire, flood, oxygen deficiency and presence of gas. Plan shall also address eventuality of evacuation/rescue in the case of collapse, accident or other significant events.

## **PART 2 - PRODUCTS**

#### 2.1 PERSONAL PROTECTIVE EQUIPMENT

A. Provide a sufficient number of approved safety or hard hats, as well as protective clothing, footwear and other equipment as required by OSHA for all Contractor's project personnel. Also maintain, on site, a sufficient number of safety hats for the use of visitors.

#### 2.2 OTHER SAFETY EQUIPMENT

A. Provide gas meters for each work crew in the tunnel to verify that the tunnel atmosphere is not oxygendeficient and does not contain other toxic or explosive gases that might cause harm or injury to project personnel.

### **PART 3 - EXECUTION**

#### 3.1 GENERAL PROCEDURES

- A. Require all personnel employed by the Contractor or any Subcontractors, whenever entering the job site, to wear approved personal protective equipment (PPE) as required by OSHA.
- B. Use only mobile diesel powered equipment within the tunnel that is in compliance with OSHA regulations. Operate equipment in such a manner as to prevent health hazards to personnel from exhaust fumes.
- C. Conduct all operations by methods and with equipment that will positively control dust, fumes, vapors, gases, fibers, fogs, mists, or other atmospheric impurities in accordance with OSHA requirements.
- D. Fire Prevention and Control: Perform all work in accordance with the applicable fire prevention and control requirements of OSHA, and Local fire department ordinances.
- E. Noise and Dust Control: Control noise and dust in accordance with applicable federal, state and local laws, safety codes, regulations and ordinances.

#### 3.2 AIR QUALITY

- A. Maintain air in the tunnel in a condition suitable for the health of the workers at all times. The Contractor should note that the tunnel may be completely blocked at some locations by collapsed material and, therefore, it is not known if there is natural air flow through the tunnel. Use gas meters to verify that the atmosphere in working areas is not oxygen-deficient and does not contain toxic or explosive gases. Use supplemental ventilating plants as may be necessary to conform to OSHA requirements.
- B. Be aware that coal is present in the subsurface and that coal mining is performed at locations near the project site. The possibility exists that methane accumulations might be observed at high points in the tunnel crown not subject to air mixing as a result of the natural ventilation in the tunnel. Employ appropriate measures to identify and treat such occurrences to minimize the potential risk to persons and equipment.
- C. Do not allow employees to work in areas where concentrations of airborne contaminants exceed federal threshold limits. Do not substitute respirators for environmental control measures. Use respirators only as prescribed by OSHA.

#### 3.3 LIGHTING

A. Provide lighting in accordance with OSHA requirements for the entire length of the tunnel. Light shall be adequate, as determined by the Engineer, to permit proper inspection of all operations at all times. Minimum lighting consisting of 60-Watt light bulb at 40 feet spacing will be maintained during all working hours. Equivalent portable lighting can be provided as an alternative to permanent lighting. Do not use open flame lights. Use flashlights and appropriate fixtures that are explosion proof, as approved by the United States Bureau of Mines or equivalent.

#### PART 4 - MEASUREMENT

4.1 The work of this Section shall be considered incidental to the project and no measurement will be made.

#### PART 5 - PAYMENT

5.1 The work of this Section shall be considered incidental to the project and no separate payment will be made. All costs associated with this Special Note shall be apportioned to specific bid items as stated in other Special Notes.

END OF SPECIAL NOTE B

#### SPECIAL NOTE C FOR PORTAL STABILIZATION

This special note applies to the measures to be implemented to stabilize the Carver Tunnel prior to preparation of the tunnel interior, installation of required rock reinforcement in the tunnel and placing of the trail bed.

#### PART 1 - GENERAL

#### 1.1 SCOPE

A. Work includes: providing labor, materials, equipment and incidentals to remove loose material from the slope area immediately above the tunnel portals.

#### 1.2 SUBMITTALS

A. Within 30 days of receiving Notice to Proceed, submit the detailed Work Plan required under Special Note A that describes the methodology and sequence for completing the work of this Section.

#### 1.3 GROUND CONDITIONS

A. The slopes above the portals are comprised of bedded rock and overburden soils. The slopes are vegetated and loose material of variable sizes is present.

#### 1.4 WORKSITE CONDITIONS

- A. Methods of construction shall be such as to ensure the safety of the Work, workers and other project participants and adjacent property. Work shall conform to the requirements of all federal, state and local codes, laws, regulations and ordinances. The Contractor is solely responsible for maintaining safe working conditions at the worksite at all times.
- B. Conform to the requirements of Tunnel Health and Safety provisions stated in Special Note B.

#### **PART 2 - PRODUCTS**

#### 2.1 EQUIPMENT

A. Select equipment as determined necessary to complete the Work of the project and ensure that all selected pieces of equipment are compatible with site conditions and work requirements.

#### **PART 3 - EXECUTION**

## 3.1 PORTAL CLEANING AND SCALING

- A. Remove all loose material from the slope above the tunnel portal openings to a minimum height of 25 feet above the tunnel obvert at the portals. Also remove loose material from the portal slope on either side of the portal opening to a minimum distance of 15 feet on either side of the portal. Remove loose material at or beyond the stated limits only with the approval of the Engineer.
- B. Do not remove vegetation from the slopes above and around the portals
- C. Perform all scaling in conjunction with an experienced spotter located at a safe distance from the toe of slope or portal entrance to be able to advise and control the movement of all other workers in and around the site.
- D. Perform hand scaling or mechanical scaling as determined appropriate to conditions and as consistent with submitted Work Plan. Protect personnel and equipment during the scaling process to prevent damage to them. Perform scaling from the top of the designated area, proceeding down slope, removing loose rock and soil as the Work progresses.
- E. Complete scaling with the goal of limiting the depth of depressions on the face to less than 2 feet deep.

- F. Report progress of portal stabilization activities daily to the Engineer.
- G. Anticipate the sequence of portal stabilization to include, but not be limited to, a site visit with a specialist rock slope consultant or contractor, a first pass scaling effort, a follow-up meeting with the Engineer, and a final scaling effort to remove remaining materials as deemed necessary by the Engineer.

#### **PART 4 - MEASUREMENT**

4.1 Portal Cleaning and Scaling: The Department will make payment for cleaning and scaling the designated slope area above and adjacent to the tunnel portal opening on a square foot basis, with measurement made to the nearest square foot. The area will be determined by measurement of the height and width of the area or areas cleaned and scaled, accounting for the tunnel openings and with lengths and widths rounded to the nearest foot as an integer value. Contractor will delineate the cleared limits and make measurements in the presence of the Engineer, who will approve Contractor's measurements of height and width to calculate the area for payment.

## **PART 5 - PAYMENT**

5.1 The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit30075Portal Cleaning and ScalingSquare Foot

The Department will consider payment as full compensation for all work required in this note.

END OF SPECIAL NOTE C

#### SPECIAL NOTE D FOR TUNNEL INTERIOR PREPARATION

This special note applies to the preparation of the interior of the Carver Tunnel segment of the Dawkins Trail prior to installation of required rock reinforcement and the trail bed. The sequence of work, including installation of rock reinforcement and construction of the trail bed, is referred to herein, but the specific requirements for those elements are described in separate Special Notes.

#### **PART 1 - GENERAL**

#### 1.1 SCOPE

- A. Work includes: providing labor, materials, equipment and incidentals to prepare the tunnel interior by removing all fallen rock material; removing all existing steel ribs, whether deformed or not, including all associated bracing, wood lagging or other accessories used in the original tunnel support installation; and removing any other debris that may currently be within the tunnel interior.
- B. In addition, Work includes: providing labor, materials, equipment and incidentals to scale loose material from the interior surfaces of the tunnel prior to installing rock reinforcement as specified in Special Note E and to perform any other Work required by this Section.
- C. The Work also includes: providing surveys of the existing tunnel interior surface as specified herein.

#### 1.2 SUBMITTALS

A. Within 30 days of receiving Notice to Proceed, submit the detailed Work Plan required under Special Note A that describes the methodology and sequence for completing the work of this Section and related sections.

#### 1.3 QUALITY ASSURANCE

- A. The Work of this project is deemed to be specialty contractor work. The Contractor and its project superintendent shall have experience as delineated below. Submit documentation of experience with the Bid Documents. These requirements do not apply to the work to place and grade the trail bed within the tunnel.
  - 1. Contractor shall have completed a minimum of one similar rock tunnel or rock cavern rehabilitation project within the past 10 years.
  - 2. The project superintendent shall have hard rock tunneling or rock tunnel or cavern rehabilitation experience on a minimum of one project.

#### 1.4 GROUND CONDITIONS

- A. The condition of the interior of the tunnel is unknown. It has been assessed on the basis of limited observations from the tunnel portal locations and results of several geotechnical borings drilled along the existing tunnel alignment, including downhole videos. The Drawings depict the estimated profile of the tunnel roof (crown), and the estimated profile of the debris pile within the tunnel along the tunnel centerline. The tunnel roof has been surveyed only at the tunnel portals.
- B. Available information is provided on the Drawings to the Contractor as reference documentation, and it includes boring logs on a profile along the tunnel alignment with lithological descriptions and results of testing.

#### 1.5 WORKSITE CONDITIONS

A. Methods of construction shall be such as to ensure the safety of the Work, workers and other project participants and adjacent property. Work shall conform to the requirements of all federal, state and local codes, laws, regulations and ordinances. The Contractor is solely responsible for maintaining safe working conditions at the worksite at all times.

B. Conform to the requirements of Tunnel Health and Safety provisions stated in Special Note B.

#### **PART 2 - PRODUCTS**

#### 2.1 EQUIPMENT

A. Select equipment as determined necessary to complete the Work of the project and ensure that all selected pieces of equipment are compatible with site conditions and work requirements.

#### 2.2 PERMANENT STATION MARKERS

A. Provide permanent station markers having minimum dimensions of 12 inches wide by 12 inches tall and made of aluminum with reflective lettering. The station markers shall be supplied by a firm specializing in signage manufacturing. Install markers at locations as stated herein.

#### **PART 3 - EXECUTION**

#### 3.1 GENERAL

- A. Complete work to allow the trail bed to be placed in conformance with the requirements of Special Note G and to the lines grades and cross section geometry shown on the Drawings.
- B. Establish horizontal and vertical survey control in the tunnel as necessary to conform to requirements specified herein. Refer to the Boundary Survey for the Dawkins Line Railroad, which KYTC will provide to the Contractor as stated in the Drawings.
- C. Provide, install, maintain, and operate drainage facilities in the tunnel and at the portals as required to manage any infiltrating groundwater and any construction service water.
  - 1. Operate pumps continuously or intermittently, as necessary, to maintain safe and dry working conditions in the tunnel.
  - 2. Treat and convey combined groundwater and construction service water, as required, such that it can be discharged to adjacent streams in accordance with all applicable federal, state and local codes, laws, regulations and ordinances.
- D. Temporary Ventilation: Supply fresh air to work areas, as and if required, in sufficient quantity to comply with all applicable laws, safety codes, regulations and requirements of Special Note B.
- E. Noise and Dust Control: Conduct operations such that noise levels and dust controls comply with all applicable federal, state and local codes, laws, regulations and ordinances. Conduct operations to minimize the impact of noise and dust to the residents in the vicinity of the work. Enclose any compressors in sound attenuation enclosures. Equip all gasoline, diesel or air-powered equipment with silencers or mufflers on exhaust lines. Line storage bins and hoppers with materials that deaden sound.
- F. Conform to the requirements of Special Note E regarding rock reinforcement to be provided and installed by the Contractor. Install rock reinforcement as required to meet the Contractor's responsibility for providing a safe and stable excavation at all times during the Work. Nothing contained in the Specifications or Special Notes shall prevent the Contractor from providing and installing such additional reinforcement or support as it may consider necessary for the safety of the Work. No statement in these Specifications or Special Notes shall be considered to relieve the Contractor from its sole responsibility for the safety of the Work or from liability for injuries to or death of persons or damage to property.

#### 3.2 TUNNEL CLEANING AND SCALING

A. To the extent necessary, remove all loose, fallen rock materials from the tunnel interior, along with any existing railroad ballast. Separate any deleterious material, including natural rock materials such as coal or underclay, and remove from project site. Process remaining material, as may be necessary, for use in the trail

bed base course within the tunnel, consistent with requirements of Special Note G. Contractor is not required to remove all material from the tunnel interior; however, for material that remains in the tunnel, meet the requirements stated in Special Note G for the trail base course and ensure that the remaining material forms a stable work surface suitable for performing other required activities such as scaling and rock reinforcement installation.

- B. Remove all previously installed steel rib supports and appurtenances, including any tie rods, bracing, and fasteners, along with any remaining blocking or lagging materials. Remove any remaining railroad tracks, ties and appurtenances. Dispose of these materials off site.
- C. Remove loose material remaining on the exposed rock surfaces of the tunnel interior by air-water jetting or mechanical or hand tool methods, consistent with methods described in Contractor's submitted Work Plan, to expose clean undisturbed surfaces.
- D. Perform tunnel cleaning activities in a sequence in which specific lengths of tunnel are cleared, scaled and supported prior to initiating cleaning activities in the next length of tunnel, consistent with Contractor's submitted Work Plan.
- E. Install required rock reinforcement on the tunnel perimeter of the cleaned section prior to starting each successive round of tunnel cleaning activities.

#### 3.3 SURVEY

- A. Survey the tunnel perimeter subsequent to tunnel cleaning, scaling and placing of rock reinforcement using LIDAR methodology. If Contractor uses collapsed material and existing ballast without removing those materials from the tunnel, survey the tunnel prior to placing the trail base course upper and top layers described in Special Note G and perform subsequent survey to depict final configuration of the trail bed and confirm that the trail bed has been placed to the required line and grade. If Contractor removes all collapsed material and existing ballast from the tunnel for processing, then perform survey prior to constructing the trail base course.
- B. Perform LIDAR survey to provide horizontal and vertical accuracy of surveyed points no greater than 0.1 foot.
- C. Place survey data in Microstation format reflecting a plan and profile acceptable to the Engineer. Provide survey to the Engineer in electronic format (native Microstation) and in hard copy form in triplicate. Anticipate that at least two weeks of time will be required to execute the survey and receive approval of the final product by the Engineer.
- D. Place permanent station markers on the right wall of the tunnel at approximately the same height within the tunnel as the lighting at 0.05-mile intervals, based on the stationing defined by the existing railroad mile markers as shown on the Drawings. The directions of "right" and "left" as used herein are referenced to viewing the tunnel in the direction of increasing mile markers (stationing).

#### **PART 4 - MEASUREMENT**

4.1 Tunnel Interior Preparation: The Department will measure for tunnel interior preparation on a linear foot basis for the length of tunnel satisfactorily cleaned, scaled and prepared for placement of rock reinforcement and the trail bed within the tunnel, with measurement made to the nearest integer value of linear feet..

## PART 5 - PAYMENT

5.1 The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit30076Tunnel Interior PreparationLinear Foot

The Department will consider payment as full compensation for all work required in this note.

END OF SPECIAL NOTE D

#### SPECIAL NOTE E FOR ROCK REINFORCEMENT

This special note applies to the rock reinforcement to be installed within the Carver Tunnel.

#### **PART 1 - GENERAL**

#### 1.1 SCOPE

- A. Work includes: Providing labor, materials, equipment and incidentals to furnish and install rock dowels and associated accessories, welded wire fabric and mine straps as detailed in the Drawings and specified herein.
- B. Related Work: Provisions for preparing the interior surfaces of the tunnel prior to installing rock reinforcement elements are specified in Special Note D, Tunnel Interior Preparation.

#### 1.2 DEFINITIONS

- A. Rock Dowel: is a fully resin-grouted rock reinforcement element. A rock dowel consists of a threaded steel bar installed in a percussion-drilled hole with standard end hardware. Standard end hardware consists of a bearing plate, one or more beveled washers, a flat steel washer, and a hexagonal nut.
- B. Rock Reinforcement: A term that collectively refers to elements that are intended to reinforce the in-situ rock and increase the capacity of the rock to support itself. For this project, rock reinforcement is comprised of elements that include rock dowels and associated hardware, welded wire fabric and mine straps.
- C. Welded Wire Fabric: A mesh screen comprised of a square grid of uniformly spaced, parallel steel wires that are welded at all intersection points with wires and grid spacing of specified dimensions; also referred to as welded wire mesh.
- D. Mine Strap: A steel element that is more or less flat, relatively narrow and sufficiently long to bridge the distance between one or more pairs of installed rock dowels; used to provide support of the excavation perimeter between rock dowel locations.

#### 1.3 SUBMITTALS

- A. At least 30 days prior to the purchase of any rock reinforcement elements, submit shop drawings and applicable manufacturer's literature describing the specific materials proposed for use on the project. These elements include rock dowels, associated hardware for rock dowels, resin grout, welded wire fabric and mine straps. Include manufacturer's literature that provides material and strength details for the various elements, applicable manufacturer's certifications indicating conformance to requirements stated herein, and manufacturer's recommended installation procedures. For resin grout, submit manufacturer's certified test results of gel time, shelf life, and working strength for each type of resin grout to be used. Also include a statement indicating what labeling will be used for shipped materials to indicate conformance to requirements, such as shipping invoices or markings on the materials.
- B. Within 30 days of receiving Notice to Proceed, submit the detailed Work Plan required under Special Note A that describes the methodology and sequence for completing the work of this Section and related sections. In the submitted Work Plan describe all materials proposed to be used and the method of performance of the work of this Section. Also include details of materials and equipment to be used to perform required pullout tests of installed rock dowels.

#### 1.4 QUALITY ASSURANCE

- A. Rock reinforcement elements and accessories and resin grout shall be obtained from an established manufacturer who has regularly engaged in production of these products for a minimum of 5 years.
- B. Perform pullout test program of installed rock dowels as specified herein or as otherwise agreed with the Engineer. Conduct the tests in conformance with ASTM D4435. At least a one-week notice shall be given to the Engineer to facilitate viewing of the tests.

#### SPECIAL NOTE E FOR ROCK REINFORCEMENT

This special note applies to the rock reinforcement to be installed within the Carver Tunnel.

#### **PART 1 - GENERAL**

#### 1.1 SCOPE

- A. Work includes: Providing labor, materials, equipment and incidentals to furnish and install rock dowels and associated accessories, welded wire fabric and mine straps as detailed in the Drawings and specified herein.
- B. Related Work: Provisions for preparing the interior surfaces of the tunnel prior to installing rock reinforcement elements are specified in Special Note D, Tunnel Interior Preparation.

#### 1.2 DEFINITIONS

- A. Rock Dowel: is a fully resin-grouted rock reinforcement element. A rock dowel consists of a threaded steel bar installed in a percussion-drilled hole with standard end hardware. Standard end hardware consists of a bearing plate, one or more beveled washers, a flat steel washer, and a hexagonal nut.
- B. Rock Reinforcement: A term that collectively refers to elements that are intended to reinforce the in-situ rock and increase the capacity of the rock to support itself. For this project, rock reinforcement is comprised of elements that include rock dowels and associated hardware, welded wire fabric and mine straps.
- C. Welded Wire Fabric: A mesh screen comprised of a square grid of uniformly spaced, parallel steel wires that are welded at all intersection points with wires and grid spacing of specified dimensions; also referred to as welded wire mesh.
- D. Mine Strap: A steel element that is more or less flat, relatively narrow and sufficiently long to bridge the distance between one or more pairs of installed rock dowels; used to provide support of the excavation perimeter between rock dowel locations.

#### 1.3 SUBMITTALS

- A. At least 30 days prior to the purchase of any rock reinforcement elements, submit shop drawings and applicable manufacturer's literature describing the specific materials proposed for use on the project. These elements include rock dowels, associated hardware for rock dowels, resin grout, welded wire fabric and mine straps. Include manufacturer's literature that provides material and strength details for the various elements, applicable manufacturer's certifications indicating conformance to requirements stated herein, and manufacturer's recommended installation procedures. For resin grout, submit manufacturer's certified test results of gel time, shelf life, and working strength for each type of resin grout to be used. Also include a statement indicating what labeling will be used for shipped materials to indicate conformance to requirements, such as shipping invoices or markings on the materials.
- B. Within 30 days of receiving Notice to Proceed, submit the detailed Work Plan required under Special Note A that describes the methodology and sequence for completing the work of this Section and related sections. In the submitted Work Plan describe all materials proposed to be used and the method of performance of the work of this Section. Also include details of materials and equipment to be used to perform required pullout tests of installed rock dowels.

#### 1.4 QUALITY ASSURANCE

- A. Rock reinforcement elements and accessories and resin grout shall be obtained from an established manufacturer who has regularly engaged in production of these products for a minimum of 5 years.
- B. Perform pullout test program of installed rock dowels as specified herein or as otherwise agreed with the Engineer. Conduct the tests in conformance with ASTM D4435. At least a one-week notice shall be given to the Engineer to facilitate viewing of the tests.

#### 1.5 STORAGE AND PROTECTION

A. Store and protect all rock reinforcement materials in accordance with the manufacturer's recommendations and in a manner that prevents damage or deterioration prior to installation.

#### **PART 2 - PRODUCTS**

#### 2.1 ROCK DOWELS AND ACCESSORIES

- A. Provide rock dowels that conform to ASTM A325, Grade 60 and that are of the continuous thread type as supplied by Dywidag Systems International, or approved equal. All dowels shall be of the diameter shown on the Drawings. Provide rock dowels of sufficient length to provide the full embedded length shown on the Drawings with a length of between 6 and 12 inches extending from the rock surface. Provide dowel length sufficient to allow placement of nut, bearing plate, necessary washers with approximately one inch of thread projecting beyond the installed and tightened nut. Each element shall be furnished with a bearing plate, one hardened flat washer, beveled or spherical washers, and one nut. Each element shall have tips with a bevel cut.
- B. Provide rock dowels that are either epoxy coated or that are galvanized. Provide external accessories, such as nuts, washers and face plates that are galvanized in accordance with ASTM A123. If galvanized, provide minimum coating thickness of 100 micrometers.
- C. All rock dowels shall be supplied with spin adapters, or otherwise made to facilitate spun installation
- D. Provide bearing plates that conform to ASTM A36, and meet the load/deflection criteria of ASTM F432. Bearing plates against rock shall be a minimum of 3/8-inch thick and be of the dimensions shown on the Drawings. Holes in plate shall be reamed and beveled on the rock side and shall be large enough to permit 30 degree rock dowel skew in all directions from normal centerline.
- E. Provide nuts that are hex nuts of the heavy-duty type, compatible with rock dowels, and develop at least 125 percent of the minimum yield strength of the dowel.
- F. Provide beveled, flat, and spherical washers that conform to the requirements of ASTM F432. Flat or beveled washers shall be two inches minimum round or square and 0.125 inches thick, with the center hole 0.125 inches larger in diameter than the rock dowel or rock dowel with which it will be used.
- G. Provide resin cartridges with a casing constructed of saturated polyester providing optimum resistance to moisture, but easily ruptured to enable complete mixing during installation, and containing two distinct fractions of unsaturated polyester resin and catalyst with an intervening membrane. The resin shall be high strength polyester with non-reactive inorganic filler. The catalyst shall contain peroxide with non-reactive inorganic filler. The materials shall have thixotropic and viscous properties to permit adequate mixing of the materials by manipulating the element and to prevent the mixture from running out of the hole after mixing. Compressive strength of the mixed and cured resin shall be not less than 14,000 psi when tested in accordance with ASTM C39. The shelf life shall be not less than six months. Gel and cure time for resin shall permit proper installation in accordance with manufacturers written recommendations. The cartridges shall be of 12 inches minimum length. A quick-setting cartridge (gel time less than 2 minutes) shall be used at the back of all overhead holes to hold the rock dowel in place while the slower setting resin sets up. The number of quick-setting and slow-setting resin cartridges for rock dowels shall be sufficient to fully encapsulate the dowel along the full embedment length.
- H. The lubricant for threads and washers shall have a molybdenum disulfide base.

#### 2.2 WELDED WIRE FABRIC

- A. Provide welded wire fabric that conforms to ASTM A185 and has the wire size and mesh opening shown on the Drawings.
- B. Provide fabric that is galvanized in accordance with ASTM A123 to a minimum thickness of 100 micrometers. Provide fabric that is galvanized after welding.

#### 1.5 STORAGE AND PROTECTION

A. Store and protect all rock reinforcement materials in accordance with the manufacturer's recommendations and in a manner that prevents damage or deterioration prior to installation.

#### **PART 2 - PRODUCTS**

#### 2.1 ROCK DOWELS AND ACCESSORIES

- A. Provide rock dowels that conform to ASTM A325, Grade 60 and that are of the continuous thread type as supplied by Dywidag Systems International, or approved equal. All dowels shall be of the diameter shown on the Drawings. Provide rock dowels of sufficient length to provide the full embedded length shown on the Drawings with a length of between 6 and 12 inches extending from the rock surface. Provide dowel length sufficient to allow placement of nut, bearing plate, necessary washers with approximately one inch of thread projecting beyond the installed and tightened nut. Each element shall be furnished with a bearing plate, one hardened flat washer, beveled or spherical washers, and one nut. Each element shall have tips with a bevel cut.
- B. Provide rock dowels that are either epoxy coated or that are galvanized. Provide external accessories, such as nuts, washers and face plates that are galvanized in accordance with ASTM A123. If galvanized, provide minimum coating thickness of 100 micrometers.
- C. All rock dowels shall be supplied with spin adapters, or otherwise made to facilitate spun installation
- D. Provide bearing plates that conform to ASTM A36, and meet the load/deflection criteria of ASTM F432. Bearing plates against rock shall be a minimum of 3/8-inch thick and be of the dimensions shown on the Drawings. Holes in plate shall be reamed and beveled on the rock side and shall be large enough to permit 30 degree rock dowel skew in all directions from normal centerline.
- E. Provide nuts that are hex nuts of the heavy-duty type, compatible with rock dowels, and develop at least 125 percent of the minimum yield strength of the dowel.
- F. Provide beveled, flat, and spherical washers that conform to the requirements of ASTM F432. Flat or beveled washers shall be two inches minimum round or square and 0.125 inches thick, with the center hole 0.125 inches larger in diameter than the rock dowel or rock dowel with which it will be used.
- G. Provide resin cartridges with a casing constructed of saturated polyester providing optimum resistance to moisture, but easily ruptured to enable complete mixing during installation, and containing two distinct fractions of unsaturated polyester resin and catalyst with an intervening membrane. The resin shall be high strength polyester with non-reactive inorganic filler. The catalyst shall contain peroxide with non-reactive inorganic filler. The materials shall have thixotropic and viscous properties to permit adequate mixing of the materials by manipulating the element and to prevent the mixture from running out of the hole after mixing. Compressive strength of the mixed and cured resin shall be not less than 14,000 psi when tested in accordance with ASTM C39. The shelf life shall be not less than six months. Gel and cure time for resin shall permit proper installation in accordance with manufacturers written recommendations. The cartridges shall be of 12 inches minimum length. A quick-setting cartridge (gel time less than 2 minutes) shall be used at the back of all overhead holes to hold the rock dowel in place while the slower setting resin sets up. The number of quick-setting and slow-setting resin cartridges for rock dowels shall be sufficient to fully encapsulate the dowel along the full embedment length.
- H. The lubricant for threads and washers shall have a molybdenum disulfide base.

## 2.2 WELDED WIRE FABRIC

- A. Provide welded wire fabric that conforms to ASTM A185 and has the wire size and mesh opening shown on the Drawings.
- B. Provide fabric that is galvanized in accordance with ASTM A123 to a minimum thickness of 100 micrometers. Provide fabric that is galvanized after welding.

C. Coordinate widths of supplied fabric with the rock dowel installation pattern as shown on Drawings.

#### 2.3 MINE STRAPS

- A. Provide mine straps of W-Strap type as supplied by Dywidag Systems International, or approved equal. Provide mine straps with nominal minimum length of 10 feet, sufficient to span three installed dowels with a minimum of six inches extra on each end. Provide mine straps with a nominal width of eight inches and 12 gauge thickness. Determine hole spacing and diameter necessary to place straps over installed dowels and provide support between dowels to supplement the welded wire fabric. Determine sufficiency of the minimum dimensions specified herein.
- B. Provide mine straps that are galvanized in accordance with ASTM A123. Provide mine straps with galvanization thickness of 100 micrometers.
- C. Obtain Engineer approval of proposed mine straps prior to procurement.

#### 2.4 ROCK DOWEL PULLOUT TEST EQUIPMENT

- A. Provide pullout test equipment consisting of at a minimum:
  - 1. A suitably sized hollow ram jack;
  - 2. An adjustable bearing truss for aligning the direction of pull with the centerline of the installed rock dowel;
  - 3. A 12" x 12" x ½" bearing plate placed between the rock surface and the bearing truss to limit rock deflections;
  - 4. An extension bar for attaching the jack to the rock dowel;
  - 5. A hydraulic pump with a gauge calibrated to read directly in pounds per square inch for the ram being used;
  - 6. A dial gauge that reads in increments of 0.001 inch over a range of 2 inches;
  - 7. A magnetic or independent dial gauge mounting;
  - 8. A load cell and readout;
  - 9. All other necessary accessories.
- B. Submit calibration certificates for the load cell and all gages indicating calibrations for the equipment to be used within the previous six months prior to pullout testing.

#### **PART 3 - EXECUTION**

#### 3.1 GENERAL

- A. Install rock dowels in transverse rows through the length of the tunnel with rows spaced as shown on the Drawings. Determine specific locations of rock dowels within each row based on evaluation of as-observed rock conditions and in general conformance with the pattern shown on the Drawings, subject to approval of Engineer.
- B. After each exposure of the final rock surface, examine the surface and determine the number of rows of dowels to be installed and the specific locations for rock dowels to be installed in each row. Obtain Engineer approval prior to installation unless a safety issue exists that requires support installation prior to obtaining Engineer approval.
- C. Install welded wire fabric and determine the need for supplementary installation of mine straps. Install mine straps as approved by the Engineer.

#### 3.2 ROCK DOWELS

- A. Assume that 90 percent of the dowels to be installed will have a seven-foot embedment length and that ten percent of the dowels to be installed will have a ten-foot embedment length. Refer to Drawings for Contractor responsibility on determining locations where the longer dowels are to be installed. Selection of locations will be subject to the approval of the Engineer.
- B. Drill holes for rock dowels with rotary or rotary-percussion drills as determined by Contractor. Equip air-flush drills with either water or foam dust-suppressant equipment.
- C. Drill holes for rock dowels as at locations consistent with determinations made in accordance with Para. 3.1.A of this Special Note. Make hole diameter and depth in accordance with the manufacturer's recommendations, consistent with the rock dowel diameter and length and the grout cartridge size.
- D. Install resin-anchored rock dowels in accordance with the manufacturer's recommendations by inserting the type and number of resin cartridges into the drilled hole for the anchorage conditions. Care shall be taken to avoid premature rupture of the cartridge skin.
- E. For rock dowels installed in the upward direction at angles of 45 degrees or less to the vertical, insert one fast-setting resin cartridges at the back of the hole to hold dowel in place until remaining cartridges set and cure as required by Para. 2.1.G of this Special Note.
- F. Insert individual resin cartridges carefully into the drilled hole to avoid rupture, and position with tamping rods. Use a shaped plastic cap after every third cartridge in holes rising at more than 30 degrees above horizontal to maintain cartridges in position. The plastic cap shall be of a material that can be penetrated by the rock dowel and will not inhibit mixing of the resin and catalyst in the resin cartridges. Use the number of cartridges per hole recommended by the resin cartridge manufacturer for the combination of hole size and dowel diameter selected and confirmed by observations to ensure complete encapsulation of the rock dowels. The first five rock dowel installations will be considered trials with respect to confirming the correct number of resin cartridges. In the event that these dowels or any other installed dowels do not exhibit full encapsulation, they will be subject to rejection. Any dowel installation that is rejected must be supplemented with an additional dowel of the same length installed in close proximity to the rejected dowel, as approved by the Engineer and at no additional cost to the Department.
- G. Insert the rock dowel into the drilled hole until it contacts the first cartridge. Rotate the rock dowel at the rate recommended by the resin cartridge manufacturer, but not less than 100 rpm. Insert the dowel into the hole at a penetration rate of approximately 2 to 4 inches per second, and continue rotation for at least 10 seconds after the dowel has been fully inserted. Hold the dowel in place until the resin has hardened sufficiently to keep the dowel in place.
- H. Remove any protective grease from dowels, washers, and nuts with a suitable non-toxic solvent prior to installation. Lubricant shall be applied to the exposed end threads being careful to keep the portion to be embedded free from all grease, lubricant, and contamination. Do not contaminate threads during installation.
- I. Set rock dowel face (bearing) plates nearly flat against the rock face with the bearing surface of the nut as perpendicular to the dowel axis as practicable. Apply lubricant between the washer and nut. Maintain flat washers immediately under nuts perpendicular to rock dowels by the use of a beveled or spherical washer or washers between flat washers and bearing plates.

#### 3.3 WELDED WIRE FABRIC AND MINE STRAPS

- A. When placing welded wire fabric, provide overlaps at joints between fabric sheets of 1-1/2 times the mesh spacing.
- B. Where mine straps are used to provide supplementary rock reinforcement between rock dowels, the straps can be placed either over or under the fabric.

C. Place welded wire fabric and mine straps, where used, over the installed rock dowels between the rock surface and the steel face (bearing) plate. Place rock dowel washers and nut on the dowels over the fabric and straps, and tighten the nut to draw the fabric and straps up tightly to the rock surface so that they closely follow the rock surface.

#### 3.4 ROCK DOWEL PULLOUT TESTS

- A. Perform pullout tests in the presence of the Engineer.
- B. Provide the required equipment for performing pullout tests and maintain the equipment in good working condition. Supply equipment meeting requirements stated herein and other equipment as may be necessary for performing the pullout tests.
- C. To assure that a tested dowel is allowed to stress the resin/rock contact, set the bearing frame so that it does not bear directly on the resin, i.e., the circular or cylindrical portion of the frame that bears on the rock must be larger than the diameter of the hole. The surface of the dowel that contacts the dial indicator probe shall be machined or ground to a smooth flat surface, perpendicular to the axis of the dowel.
- D. Calibrate the hydraulic pump gauge with the load cell while connected to the jack, by a uniaxial testing machine prior to performing pullout tests. The hydraulic pump gauge shall be re-calibrated at subsequent times as directed by the Engineer during the period of construction.
- E. Keep spare parts for testing equipment in stock to prevent delays in the work, especially for the gauges and pump seals.
- F. The Engineer will designate up to 10 percent of the installed dowels to be tested. The Engineer will initially designate one out of each ten installed rock dowels to be tested. If the tested dowel fails to meet criteria stated in this Special Note, then two additional rock dowels out of the group of ten will be designated by the Engineer to be tested. If either of these two additional dowels fails to meet the specified pullout test criteria, all remaining of the ten rock dowels represented by the test group will be subjected to pullout testing. Replace rock dowels that fail to meet the pullout test criteria with satisfactorily installed rock dowels at locations in close proximity to the failed dowels, as approved by the Engineer and at no additional cost to the Department.
- G. Perform pullout tests not less than one or more than 3 days after installation of the rock reinforcement. If pullout tests are not made within the time frame specified above, the results thereof will be rejected and the Contractor shall be required to perform an additional pullout test in accordance with Specification requirements at no additional cost to the Owner.
- H. Rock dowels for pullout testing will typically be installed in general accordance with ASTM D-4435 (current version), as amended by this Special Note, using the same materials, equipment and personnel as that used for production rock dowel installation. Rock dowels shall be tested to 30 Kips in three 10 Kip increments, while monitoring elongation of the dowels with a dial gage. Tested rock dowels must achieve a minimum pullout load of 30 Kips to be acceptable installations. If the Engineer deems the elongation excessive, the Contractor may be directed to install additional rock dowels for tunnel rock mass reinforcement in the area of the failed test.
- I. Engineer may alter the test load and length of resin bond, at Engineer's discretion, if the actual resin/rock bond strength is not adequate.
- J. The Engineer may reduce the frequency of pullout testing upon successful demonstration of consistent compliance with specified requirements. The Engineer will then randomly designate one rock dowel member out of each fifty installed members for pullout testing. Should a high failure rate occur, as determined by the Engineer, the specified initial frequency of testing will be resumed and be subject to subsequent reduction by the Engineer.
- K. Each installed rock dowel that is tested shall be subjected to a ten-minute hold test during which the dowel shall withstand the load specified with a movement of less than 0.50-inch. Failure shall be considered as any

dowel not sustaining the above force for a 10-minute hold period and moving outward beyond the above criteria.

## **PART 4 - MEASUREMENT**

- 4.1 Rock Dowels: The Department will measure for payment each rock dowel that meets the dimensional requirements stated herein, properly installed with required end hardware and fully grouted using polyester resin grout meeting the requirements stated herein. Dowels with seven-foot embedment length and those with ten-foot embedment lengths will be measured and paid separately.
- 4.2 Welded Wire Fabric: The Department will measure for payment the area of welded wire fabric provided and satisfactorily placed as stated herein. The measurement will be based on the actual length and width of each sheet or roll of welded wire fabric actually placed, including the overlap at joints between sheets, provided that the overlap is no greater than stated herein. A deduction will be made in the measurement where the overlap is greater than stated herein.
- 4.3 Mine straps: The Department will measure for payment the weight of mine straps provided and satisfactorily installed, as approved by the Engineer. The weight will be based on the certified weight per each strap as determined by the manufacturer, rounded to the nearest pound, with measurement prorated on a length basis for straps that are cut to shorter lengths than the lengths in which the straps are supplied by the manufacturer.
- 4.4 Rock Dowel Pullout Tests: The Department will not make any measurements of the pullout testing for payment. Such testing will be considered to be incidental to the work of furnishing and installing the required rock dowels.

#### **PART 5 - PAYMENT**

5.1 The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
30077	Rock Dowels (Seven-Foot	
	Embedment Length)	Each
30077	Rock Dowels (Ten-Foot	
	Embedment Length)	Each
30078	Welded Wire Fabric	Square Foot
30079	Mine Straps	Each

The Department will consider payment as full compensation for all work required in this note.

END OF SPECIAL NOTE E

#### SPECIAL NOTE F FOR TIMBER CANOPY

This special note applies to the timber canopies to be constructed adjacent to the portals at either end of the Carver Tunnel component of the Dawkins Trail.

#### PART 1 - GENERAL

#### 1.1 SCOPE

A. Work includes: furnishing labor, materials, and equipment to design, furnish, and install structural timber framing as detailed in the Drawings, including structural design of framing details to include joinery and connections not provided in the Drawings, and supplying associated fasteners to complete the canopy system as shown. The specified work includes posts, beams, struts, braces and fasteners or connectors.

#### 1.2 SUBMITTALS

- A. Shop Drawings: Submit within 30 days of receiving Notice to Proceed; show material properties, full dimensions of each member, and layout of timber frame system. Show large-scale details of joints and connections. Provide hardware cut sheets and design values for fasteners.
- B. Manufacturer's Certification: Provide manufacturer's certification that supplied lumber meets the required grading. Grade stamping of supplied timber materials can be used in place of grade certification, provided that grade stamping is evident and easily discernable by the Department or Engineer. Provide manufacturer's certification of moisture content of timber members to be used in construction of the portal canopies.
- C. Method Statement: Submit within 30 days of Notice to Proceed a statement describing the methodology for completing the work. This should include a general statement of how the timber canopy frame will be constructed, how materials will be stored prior to construction, and timing of canopy construction relative to overall project work. This can be incorporated into the method statement required under Special Note A.
- D. Submit within 30 days of Notice to Proceed documentary evidence of experience requirements for fabricator and erector of timber framing for canopies.

#### 1.3 QUALITY ASSURANCE

- A. Experience: Ensure that fabricator and erector of timber framing have at least 5 years of experience in fabrication and erection of timber framing.
- B. Timber Grading: Ensure that timber materials provided meet grading and species requirements established in this Special Note or in Standard Specifications Section 818.

#### 1.4 WORKSITE CONDITIONS

- A. Methods of construction shall be such as to ensure the safety of the Work, workers and other project participants and adjacent property. Work shall conform to the requirements of all federal, state and local codes, laws, regulations and ordinances. The Contractor is solely responsible for maintaining safe working conditions at the worksite at all times.
- B. Conform to the requirements of Tunnel Health and Safety provisions stated in Special Note B.

#### **PART 2 - PRODUCTS**

#### 2.1 TIMBER

A. Timber Species and Grade: Conform to requirements of KYTC Standard Specifications, 2012 Edition, Paragraph 818.04, except that Timber Grade 1 is required.

- B. Timber Performance Requirements: Select timber species and grade that comply with Paragraph 2.1.A and that meet the following:
  - 1. Allowable Stress Ratings: Fb 1300 psi and E 1,600,000 psi.
  - 2. Moisture Content: Provide timber with 19 percent maximum moisture content 2 inches from surface at time of installation.
- C. Use free of heart center timbers. Do not use timber with excessive reaction wood.
- D. Dressing: Provide timber that is rough sawn (Rgh) unless otherwise indicated.
- E. Incising: To be performed by treater for treated products.
- F. End Sealer: Manufacturer's standard, transparent, colorless wood sealer effective in retarding transmission of moisture at cross-grain cuts and compatible with finish.
- G. Penetrating Sealer: Manufacturer's standard, transparent, penetrating wood sealer compatible with finish.

#### 2.2 FASTENERS

- A. General: Provide fasteners of size and type complying with requirements specified for material and manufacture and that are hot-dip galvanized.
- B. Wood Screws: ASME B18.6.1.
- C. Proprietary Fasteners: provide one of the following types
  - 1. RSS structural screws by GRK or accepted equivalent.
  - 2. Timberlok fasteners by FastenMaster or accepted equivalent.
  - 3. Strong-Drive SDS Heavy Duty Connector screws by Simpson Strong-tie or accepted equivalent.
  - 4. System WFC, WFR, WFD or WT timber fasteners by SFS intec or accepted equivalent.
  - 5. Timberlinx steel connectors by Timberlinx, Division of Michael Preston Distributors Limited or accepted equivalent.
- D. Lag Bolts: ASME B18.2.1.
- E. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and flat washers where required.
- F. Threaded Rods: ASTM A 36.

#### 2.3 STEEL CONNECTION MATERIALS

- A. Unless otherwise indicated, fabricate steel connection materials and steel elements from the following materials:
  - 1. Structural-steel shapes, plates, and flat bars complying with ASTM A 36.
  - 2. Round steel bars complying with ASTM A 575, Grade M 1020.
- B. Finish: Provide hot-dip galvanized steel assemblies and fasteners, galvanized after fabrication, to comply with ASTM A 123/A 123M or ASTM A 153/A 153M. Minimum coating thickness to be 100 micrometers.

#### 2.4 FABRICATION

- A. Shop fabricate members by cutting and restoring exposed surfaces to match uncut timber surfacing. Predrill for fasteners and assembly of units.
  - 1. Finish exposed surfaces to provide smooth finish.

- 2. Fabricate timber members before treatment to greatest extent possible. Where fabrication must be done after treatment, apply field-treatment preservative to comply with AWPA M4. Use copper naphthenate treatment for all timber members.
- B. Camber: Fabricate horizontal members and inclined members with slope of less than 1:1 with natural convex bow (crown) up to provide camber.
- C. Seal Coat: After fabricating and surfacing each unit, apply saturation coat of penetrating sealer on surfaces of each unit except for treated wood where treatment included water repellent.
- D. Timber sizes are nominal dimensions prior to shrinkage. Plane, adze, or otherwise dress timber to square, uniform dimension at joinery locations. Dressed dimensions shall not be more than 1/2 inch under size indicated in drawings.
- E. Waney edges are permitted provided they do not exceed 1/8 of a face.
- F. Timbers with moderate bow are permitted where their intended use will straighten them. Place crowns up for spanning members. Do not use severely bowed timbers or timbers bowed in more than one direction.
- G. Remove staining from soil, oil, or grease.
- H. Provide ¼-inch symmetric chamfer to exposed edges of beams and posts.
- I. Cut joints accurately to make neat, snug fit.
- J. Layout marks and identification marks shall not be visible on completed frame.

#### 2.5 WELDED WIRE FABRIC

A. Meet requirements stated on Drawings and in Special Note E.

#### **PART 3 - EXECUTION**

#### 3.1 DELIVERY, STORAGE AND HANDLING

- A. Schedule timber delivery and installation to avoid extended on-site storage.
- B. Keep timber members dry during delivery and storage. Cover timber with weathertight tarps.
- C. Protect stored timber members from high or low relative humidity to the extent practical.
- D. Cut and stack timber so as not to encourage growth of sap-stain fungi, mold, carpenter ants, borers, etc. Stack timbers with spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

#### 3.2 TIMBER CANOPY CONSTRUCTION

- A. Prepare ground surface outside and adjacent to tunnel portals as required for canopy construction and to meet bearing requirement stated in the Drawings.
- B. Fabricate all required canopy elements and erect canopies at both portals to the dimensions shown on the Drawings. Erect timber elements to ensure that vertical members are plumb, horizontal members are true and level. Use temporary bracing as required to maintain lines and levels until canopy structure is sufficiently complete to form a stable structure. Fasten timber elements so that completed canopy structure is a stable, standalone structure.
- C. Handle and temporarily support heavy timber construction to prevent surface damage, compression, and other effects that might damage the finished surface or impact the preservative. Tools used to drive or pull joints together shall not mar finished surface of timber.

- D. Cutting: Avoid extra cutting after fabrication. Where field fitting is unavoidable, comply with finish and preservative treatment requirements for shop fabrication.
- E. Place required welded wire fabric layers on canopy arch sections, using welded wire fabric that meets requirements stated on Drawings. Fasten to timber canopy frame as stated on Drawings.
- F. Place trail bed base coarse around, above and in front of canopy base as shown on Drawings. Protect timber from damage while placing stone base and take care to ensure that connections are not compromised.
- 3.3 ADJUSTING AND CLEANING
  - A. Repair damaged surfaces after completing erection. Replace damaged timbers at no cost to the Department if repairs are not approved by Engineer.

#### **PART 4 - MEASUREMENT**

4.1 Timber Canopy: The Department will measure for payment each timber canopy structure completed and accepted by the Department or Engineer, provided that the structures are completed as specified in this Special Note, not damaged during subsequent trail bed placement or properly prepared, if damage occurs, in a manner acceptable to the Department or Engineer.

#### **PART 5 - PAYMENT**

5.1 The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
30080	Timber Canopy	Each

The Department will consider payment as full compensation for all work required in this note.

END OF SPECIAL NOTE F

#### SPECIAL NOTE G FOR TUNNEL PATH SURFACING

This special note applies to the procedures for placing the base and top courses of the trail bed within specified limits for the Carver Tunnel component of the Dawkins Trail project, including trail sections within the tunnel as well as trail sections outside the tunnel that are included in the Carver Tunnel component of the project.

#### **PART 1 - GENERAL**

#### 1.1 SCOPE

A. Work includes: providing labor, materials, equipment and incidentals to prepare and place trail bed materials, including furnishing supplemental materials as required.

#### 1.2 SUBMITTALS

A. Within 30 days of receiving Notice to Proceed, submit a detailed Work Plan that describes the methodology for processing on-site collapsed rock material removed from the tunnel to meet requirements stated in this Special Note for use in the trail bed base course, procedures for placing the trail bed and for subsequently demonstrating that the trail bed meets the grade requirements shown on the Drawings. This Work Plan can be coordinated with and submitted as part of the detailed Work Plan required under Special Note A.

#### 1.3 QUALITY ASSURANCE

- A. Perform quality control activities to demonstrate that the on-site processed materials and any supplemental materials furnished from off-site locations meet the requirements for their intended use in the trail bed. Conform to the requirements of Standard Specifications Section 113.
- B. Perform surveys as required to demonstrate that the finished trail path within the project limits meets the specified grade requirements.

#### **PART 2 - PRODUCTS**

#### 2.1 BASE COURSE

- A. Base Course lower layer: Compacted material processed from on-site collapsed rock material and any existing stone ballast, with maximum fragment size of one foot maximum in any direction and deleterious materials such as coal or underclay removed to the extent practical, consistent with Special Note D. Meet the requirements of Standard Specifications Sub-paragraph 206.03.02A or 206.03.02C, depending on the character of the collapsed material in the tunnel. Supplement existing material as and if necessary, with stone meeting the requirements of No. 4 coarse aggregate stated in Standard Specifications Section 805.
- B. Base Course upper layer: Stone derived from on-site collapsed rock material and any existing stone ballast that is processed and crushed on site to meet the gradation requirements for No. 3 coarse aggregate stated in Standard Specifications Section 805. Available limestone from the collapsed material can be supplemented with sandstone fragments derived from the collapsed material.

#### 2.2 TOP COURSE

A. Compacted 3/8-inch minus crusher fines limestone aggregate meeting the gradation requirements stated on the Drawings.

#### 2.3 PROCESSING EQUIPMENT

A. Select equipment as determined necessary to complete the Work of the project and ensure that selected pieces of equipment are compatible with work requirements. Provide equipment capable of achieving the material requirements stated herein.

#### **PART 3 - EXECUTION**

#### 3.1 GENERAL

- A. Stockpile and protect any stone materials removed from tunnel as part of tunnel interior cleaning until ready to process.
- B. Process stone materials removed from tunnel to the material requirements stated herein for the trail base course lower layer. Excess materials, if any, can be processed for use in the base course upper layer provided that the material requirements stated herein are met.
- C. Place each layer completely within the established project limits prior to placing the overlying layer or place layers in a staggered sequence, as established in the detailed Work Plan.
- D. Advise the Engineer or Department as soon as possible if the volume of on-site material is insufficient to complete the base course and supplemental materials will be needed.
- E. If there is an excess of material removed from the tunnel, remove the excess material to an off-site disposal location.

#### **PART 4 - MEASUREMENT**

4.1 Trail Path Surfacing: The Department will measure the length of trail path placed on a linear foot basis, with measurement rounded to the nearest whole number of linear feet. The measurement includes the base course (both layers) only, placed to the widths and length as shown on the Drawings or as stated in the Special Notes. Measurement and payment for the surface or top course of the trail is covered elsewhere in the Contract Documents.

#### **PART 5 - PAYMENT**

5.1 The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	Pay Item	Pay Unit
30081	Tunnel Path Surfacing	Linear Foot

The Department will consider payment as full compensation for all work required in this note.

END OF SPECIAL NOTE G

#### SPECIAL NOTE H FOR LED TUNNEL LUMINAIRE

This special note applies to LED tunnel luminaire to be surface mounted along the interior wall of the Carver Tunnel.

#### **PART 1 - GENERAL**

#### 1.1 SCOPE

A. Work includes: furnishing labor, materials, and equipment to design, furnish, and install LED tunnel luminaires as detailed in the Drawings, including structural design of mounting details to include joinery and connections not provided in the Drawings, and supplying associated fasteners to complete the lighting system as shown. The specified work includes luminaires, splices, connectors, rock bolts and plates.

#### 1.2 DEFINITIONS

- A. Luminaire: Complete lighting fixture, including ballast housing if provided.
- B. CRI: Color-rendering index.
- C. LED: Light emitting diode.

#### 1.3 SUBMITTALS

- A. Shop Drawings: Submit within 30 days of receiving Notice to Proceed; show material properties, full dimensions of each luminaire, and layout of luminaire mounting system. Show large-scale details of joints and connections. Provide hardware cut sheets and design values for luminaire, brackets and fastening hardware.
- B. Manufacturer's Certification: Provide manufacturer's certification that supplied luminaire meets the required lighting criteria and all associated hardware meets the required material and size for structurally supporting the luminaire.
- C. Method Statement: Submit within 30 days of Notice to Proceed a statement describing the methodology for completing the work. This should include a general statement of the materials used for housing and mounting the luminaire, how it will be constructed, how materials will be stored prior to construction, and timing of lighting system construction relative to overall project work. This can be incorporated into the method statement required under Special Note A.
- D. Submit within 30 days of Notice to Proceed documentary evidence of experience requirements for fabricator and erector of LED tunnel luminaire.

#### E. Product Data:

- Photometric data based on laboratory tests of each luminaire type, complete with indicated lamps, ballasts, and accessories.
  - a. Photometric data shall be certified by manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products.
- 2. Drivers, including energy-efficiency data.
- 3. LED, including life, output, and energy-efficiency data.

#### 1.4 QUALITY ASSURANCE

- A. Experience: Ensure that fabricator and erector of the tunnel luminaire have at least 5 years of experience in fabrication and erection of luminaires and associated hardware for mounting.
- B. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by an independent agency, with the experience and capability to conduct the testing indicated, that is an NRTL as defined by OSHA in 29 CFR 1910.7.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- D. Comply with IEEE C2, "National Electrical Safety Code."
- E. Comply with NFPA 70.

#### 1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs or alterations from special warranty coverage.
  - 1. Warranty Period for Luminaires: Five years from date of Substantial Completion.

#### 1.6 WORKSITE CONDITIONS

- A. Methods of construction shall be such as to ensure the safety of the Work, workers and other project participants and adjacent property. Work shall conform to the requirements of all federal, state and local codes, laws, regulations and ordinances. The Contractor is solely responsible for maintaining safe working conditions at the worksite at all times.
- B. Conform to the requirements of Tunnel Health and Safety provisions stated in Special Note B.

#### **PART 2 - PRODUCTS**

#### 2.1 LUMINAIRE

- A. Luminaire: Conform to requirements of KYTC Standard Specifications, 2012 Edition, section 834, except as specified in this document.
- B. Housing: One piece 5VA fiberglass with integral perimeter channel utilizing continuous poured-in-place closed cell gasket. Housing approved as a wireway and as through wiring. Stainless steel latches. Pre drilled holes with wet location fittings at each end of luminaire.
- C. Luminaires shall comply with UL 1598 and be listed and labeled for installation in wet locations by an NRTL acceptable to authorities having jurisdiction.
- D. Metal Parts: Free of burrs and sharp corners and edges.
- E. Lenses: 100% impact-modified frosted acrylic lineal ribs.

- F. Electrical
  - 1. Input Voltage: 120-277V.
  - 2. Input Frequency: 60Hz.
  - 3. Input Wattage: 61W maximum.
  - 4. Integral surge protection.
  - 5. Dimming: voltage controlled dimming of 50%.
- G. LED
  - 1. Color Temperature: 4100K.
  - 2. CRI: 65, minimum.
  - 3. Lumen output: 4000 lumens, minimum.
  - 4. Rated life: 60,000 hours, minimum (L80).

#### 2.2 STEEL MATERIALS

- A. Unless otherwise indicated, fabricate steel connection materials and steel elements from the following materials:
  - 1. Structural-steel shapes, plates, and flat bars complying with ASTM A 36.
  - 2. Rock bolts that conform to Special Note E.
- B. Finish: Provide hot-dip galvanized steel assemblies and fasteners, galvanized after fabrication, to comply with ASTM A 123/A 123M or ASTM A 153/A 153M.

#### 2.3 LUMINAIRE INSTALLATION

- A. Fasten luminaires to indicated structural supports.
- B. Adjust luminaires that require field adjustment or aiming.

#### 2.4 FIELD QUALITY CONTROL

- A. Inspect each installed fixture for damage. Replace damaged fixtures and components.
- B. Illumination Observations: Verify normal operation of lighting units after installing luminaires and energizing circuits with normal power source.
- C. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

#### **PART 3 - MEASUREMENT**

3.1 LED Tunnel Luminaire: The Department will measure for payment each LED Tunnel Luminaire completed and accepted by the Department or Engineer, provided that the luminaires are completed as specified in this Special Note, if not damaged or if damage occurs, in a manner acceptable to the Department or Engineer.

#### **PART 4 - PAYMENT**

4.1 The Department will make payment for the completed and accepted quantities under the following:

 $\begin{array}{ccc} \underline{\text{Code}} & \underline{\text{Pay Item}} & \underline{\text{Pay Unit}} \\ ---- & \underline{\text{LED Tunnel Luminaire}} & \underline{\text{Each}} \end{array}$ 

The Department will consider payment as full compensation for all work required in this note.

END OF SPECIAL NOTE H

#### SPECIAL NOTE I FOR MOTION SENSOR

This special note applies to the motion sensors to be mounted on the splice boxes along the interior wall of the Carver Tunnel.

#### **PART 1 - GENERAL**

#### 1.1 SCOPE

A. Work includes: furnishing labor, materials, and equipment to design, furnish, and install motion sensors as detailed in the Drawings, including structural design of mounting details to include joinery and connections not provided in the Drawings, and supplying associated fasteners to complete the occupancy sensing system as shown. The specified work includes motion sensors, splices and fastening hardware.

#### 1.2 DEFINITIONS

- A. LED: Light-emitting diode.
- B. PIR: Passive infrared.

#### 1.3 SUBMITTALS

- A. Shop Drawings: Submit within 30 days of receiving Notice to Proceed; show material properties, full dimensions of each motion sensor. Show large-scale details of joints and connections. Provide hardware cut sheets and design values for motion sensor brackets and fastening hardware.
- B. Method Statement: Submit within 30 days of Notice to Proceed a statement describing the methodology for completing the work. This should include a general statement of how the lighting controls system utilizing the motion sensors will be constructed, how materials will be stored prior to construction, and timing of construction relative to overall project work. This can be incorporated into the method statement required under Special Note A.
- C. Submit within 30 days of Notice to Proceed documentary evidence of experience requirements for fabricator and erector of the motion sensors to be used.
- D. Product Data: For each type of product indicated.
  - 1. Shop Drawings: Show installation details for occupancy and light-level sensors.
  - 2. Interconnection diagrams showing field-installed wiring.
  - 3. Field quality-control test reports.
  - 4. Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals.

#### 1.4 QUALITY ASSURANCE

- A. Experience: Ensure that fabricator and erector of the motion sensor will have at least 5 years of experience in fabrication and erection of motion sensing and lighting controls.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

MOTION SENSOR Special Note I-1

#### 1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs or alterations from special warranty coverage.
  - 1. Warranty Period for Motion Sensors: Five years from date of Substantial Completion.

#### 1.6 WORKSITE CONDITIONS

- A. Methods of construction shall be such as to ensure the safety of the Work, workers and other project participants and adjacent property. Work shall conform to the requirements of all federal, state and local codes, laws, regulations and ordinances. The Contractor is solely responsible for maintaining safe working conditions at the worksite at all times.
- B. Conform to the requirements of Tunnel Health and Safety provisions stated in Special Note B.

#### **PART 2 - PRODUCTS**

#### 2.1 MOTION SENSOR

- A. PIR Type: wall mounting; detect occupancy by sensing a combination of heat and movement in area of coverage.
- B. Performance Requirements: Suitable for operation in ambient temperatures ranging from minus 40 to plus 130 deg F, rated as raintight according to UL 773A.
  - 1. Operation:
    - a. Normal lumen output to be 50% when sensor is not tripped.
    - b. Increase lumen output by 100% when sensing infrared energy changes between background and moving body in area of coverage and maintain lumen output until sensor is not tripped for 15 minutes at which Lumen output returns to 50%.
  - 2. Mounting:
    - a. Sensor: Suitable for mounting in any position on a standard outdoor junction box.
  - 3. Electrical
    - a. Max Load: 800W@120VAC.
    - b. Frequency: 50/60Hz.
    - c. Dimming Load: <20mA (0-10VDC LED Drivers).
- C. Detector Sensitivity: Detect occurrences of 6-inch minimum movement of any portion of a human body that presents a target of not less than 36 sq. in.
- D. Detection Coverage: Up to 80 feet with a field of view of 180 degrees.
- E. Individually Mounted Sensor: Contacts rated to operate the connected relay, complying with UL 773A. Sensor shall be powered from the relay unit.
  - 1. Relay Unit: Dry contacts rated for 20-A driver load at 120-277VAC. Voltage supply to sensor shall be 120VAC.
  - 2. Indicator: LED, to show when motion is being detected during testing and normal operation of the sensor.

MOTION SENSOR Special Note I-2

#### **PART 3 - EXECUTION**

#### 3.1 SENSOR INSTALLATION

A. Install and aim sensors in locations to achieve not less than 90 percent coverage of areas indicated. Do not exceed coverage limits specified in manufacturer's written instructions.

#### 3.2 FIELD QUALITY CONTROL

- A. Perform the following field tests and inspections and prepare test reports:
  - 1. After installing time switches and sensors, and after electrical circuitry has been energized, adjust and test for compliance with requirements.
  - 2. Operational Test: Verify operation of each lighting control device, and adjust time delays.
- B. Lighting control devices that fail tests and inspections are defective work.

#### 3.3 ADJUSTING

A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide onsite assistance in adjusting sensors to suit occupied conditions. Provide up to 2 visits to site during other-thannormal occupancy hours for this purpose.

#### **PART 4 - MEASUREMENT**

4.1 Motion Sensor: The Department will measure for payment each motion sensor completed and accepted by the Department or Engineer, provided that the sensors are completed as specified in this Special Note, not damaged during subsequent construction or properly prepared, if damage occurs, in a manner acceptable to the Department or Engineer.

#### **PART 5 - PAYMENT**

5.1 The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
	Motion Sensor	Each

The Department will consider payment as full compensation for all work required in this note.

END OF SPECIAL NOTE I

MOTION SENSOR Special Note I-3

	Right-of-Way Ce	rtific	ation	Form	Revised 2/22/11
<b>√</b> Fe	deral Funded		Original		
Sta	ate Funded		Re-Cert	ification	
Interstate, Appalaci projects that fail und apply, KYTC shall r	completed and submitted to FHWA with the hia, and Major projects. This form shall a der Conditions No. 2 or 3 autlined elsewho esubmit this ROW Certification prior to continuous this form shall be completed and retained	lso be s ere in th enstructi	ubmitted his form. ion contra	to FHWA for <u>all</u> federal- When Condition No. 2 on the Award. For all other	aid r 3
Date: 5-1-15					
Project Name:		Lei	tting Date	29-May-2015	
Project #:		Co	unty:	Magoffin-Breathitt	
ltem #:	12-3011.50	Fe	deral #:		
Description of F	Project:				
properties to improvement Projects that re	ed transportation improvement will be but to be acquired, individuals, families, and be not to be removed as a part of this project equire new or additional right-of-	usiness t. way a	ses ("reloc	calees") to be relocated,	ions
sanitary hot accordance	R 635,309, the KYTC hereby certify that a using or that KYTC has made available to with the provisions of the current FHWA Assistance Program and that at least one apply.)	relocal directiv	lees adeq e(s) cove	uate replacement housi ring the administration o	ing in of the Highway
been ac court bu right-of- possess	ion 1. All necessary rights-of-way, included on the including legal and physical possest legal possession has been obtained. The way, but all occupants have vacated the sion and the rights to remove, salvage, or value has been pald or deposited with the	ession. here m lands a demoli	Trial or a ay be son nd improving sh all imp	ppeal of cases may be possible improvements remaind the improvements remaind the improvements and KYTC has	pending in ning on the physical
to use a appeal o been ob vacated improve market	ion 2. Although all necessary rights-of-wall rights-of-way required for the proper exof some parcels may be pending in court of some parcels may be pending in court of all the parcels will be paid of entry has been obtain and KYTC has physical possession and ements. Fair market value has been paid value for all pending parcels will be paid of contract. (See note 1 below.)	ecution and on ed, the I right to	of the property of the propert	oject has been acquired cels full legal possessio s of all lands and improv salvage, or demolish al th the court for most par	. Trial or in has not vements have il cels. Fair
of a full	te 1: The KYTC shall re-submit a right-of off Federal-Aid construction contracts. Av legal possession and falr market value fo FHWA has concurred in the re-submitted	rard mu	st not to l	pe made until after KYT( been paid or deposited v	C has obtained

### Right-of-Way Certification Form

Revised 2/22/11

Condition 3. The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. However, all remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. The KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary rights-of-way will not be fully acquired, and/or some occupants will not be relocated, and/or the fair market value will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction. A full explanation and reason for this request, including identification of each such parcel and dates on which acquisitions, payments, and relocations will be completed, is attached to this certification form for FHWA concurrence. (See note 2.)

Note 2: The KYTC may request authorization on this basis only in unique and unusual circumstances. Proceeding to bid letting shall be the exception and never become the rule. In all cases, the KYTC shall make extraordinary efforts to expedite completion of the acquisition. payment for all affected parcels, and the relocation of all relocatees prior to AWARD of all Federal-Aid construction contracts or force account construction.

Approved:

Joe Tackett

Printed Name

Signature

Right-of-Way Supervisor

DIMAYZO15

Approved:

Approved:

Printed Name

Signature

KYTC, Director of ROW &Utilities

No Signature Required as per FHWA - KYTC

2013 Stewardship Agreement

FHWA, ROW Officer (when applicable)

**Printed Name** 

Signature

Page 2

# Right-of-Way Certification Form Revised 2/22/11

Project	Name:		2		<del></del>		E#
Project	#:				County:	Magoffin-	-Breathitt
llem #:		12-3011.5			Federal #		
Letting	Date:	29-May-20	15		_		
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# N O T I C E

# DEPARTMENT OF THE ARMY CORPS OF ENGINEERS

#### NATIONWIDE PERMIT AUTHORIZATION

**PROJECT:** Breathitt/Magoffin County, Item No. 12-3011.50 Dawkins Trail Project

The Section 404 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Projects". In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Corps of Engineers. A copy of any request to the Corps of Engineers to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



## Nationwide Permit No. 14, Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States.

- a. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States.
- b. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.
- c. This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- d. This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds

1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Valid from March 19, 2012 through March 18, 2017

#### **Nationwide Permit General Conditions**

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

- 1. <u>Navigation</u>. (a) No activity may cause more than a minimal adverse effect on navigation.
- (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. <u>Spawning Areas</u>. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
  - 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car

bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

- 7. <u>Water Supply Intakes</u>. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. <u>Adverse Effects From Impoundments</u>. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. <u>Equipment</u>. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River

designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

- 17. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete preconstruction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

- (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or <a href="http://www.fws.gov/ipac">http://www.fws.gov/ipac</a> and <a href="http://www.noaa.gov/fisheries.html">http://www.noaa.gov/fisheries.html</a> respectively.
- 19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must

still wait for notification from the Corps.

- (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.
- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist

of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality</u>. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with

any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

- 28. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 29. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)	 	 	
(Date)			_

- 30. <u>Compliance Certification</u>. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
  - (c) The signature of the permittee certifying the completion of the work and mitigation.

- 31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) <u>Contents of Pre-Construction Notification</u>: The PCN must be in writing and include the following information:
  - (1) Name, address and telephone numbers of the prospective permittee;
  - (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative

description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

- (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
- (c) <u>Form of Pre-Construction Notification</u>: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
- (d) <u>Agency Coordination</u>: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- (2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments.

The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

- (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

#### D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

- 2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.
- 3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

#### E. Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
  - 3. NWPs do not grant any property rights or exclusive privileges.
  - 4. NWPs do not authorize any injury to the property or rights of others.
  - 5. NWPs do not authorize interference with any existing or proposed Federal project.

STEVEN L. BESHEAR GOVERNOR LEONARD K. PETERS SECRETARY

#### **ENERGY AND ENVIRONMENTAL PROTECTION CABINET**

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
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# General Certification--Nationwide Permit # 14 Linear Transportation Projects

This General Certification is issued March 19, 2012, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

- The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
- 2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
- 3. The activity will impact less than 1/2 acre of wetland/marsh.
- 4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet is not covered under this general water quality certification.



#### General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 2

- For a single and complete linear transportation project, the cumulative length of impacts less than 300 linear feet of surface waters within each Hydrologic Unit Code (HUC) 14 watershed will not exceed 500 linear feet.
- Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
- 7. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
- 8. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
- 9. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
  - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
  - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
  - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
  - Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
  - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.

#### General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 2

- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

## **MATERIAL SUMMARY**

CONTRACT ID: 151224	STPE 6000 (031)	DE017DAWK1524
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CARVER TUNNEL (BREATHITT COUNTY) DAWKINS TRAIL PHASE 3: CARVER TUNNEL REHAB & LIGHTING IN BREATHITT COUNTY TUNNELS, A DISTANCE OF .7 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0195	00001	DGA BASE	26.00	TON
0200	00212	CL2 ASPH BASE 1.00D PG64-22	25.00	TON
0205	00301	CL2 ASPH SURF 0.38D PG64-22	8.00	TON
0210	30072	BALLAST ROCK	1,725.00	TON
0215	30073	3/8 IN MINUS CRUSHER FINES	1,150.00	TON
0220	04791	CONDUIT-3/4 IN	383.00	LF
0225	04792	CONDUIT-1 IN	792.00	LF
0230	04810	ELECTRICAL JUNCTION BOX	9.00	EACH
0235	04832	WIRE-NO. 12	5,645.00	LF
0240	04833	WIRE-NO. 8	6,100.00	LF
0245	21563NN	SPLICE BOX - (8' X 6' X4')	10.00	EACH
0250	24750EC	LED TUNNEL LUMINAIRE	93.00	EACH
0255	30082	MOTION SENSOR	9.00	EACH
0260	30075	PORTAL CLEANING & SCALING - (BREATHITT)	2,350.00	SQFT
0265	30076	TUNNEL INTERIOR PREPARATION - (BREATHITT)	750.00	LF
0270	30077	ROCK DOWELS - (7 FEET LONG, BREATHITT)	1,800.00	EACH
0275	30077	ROCK DOWELS - (10 FEET LONG, BREATHITT)	200.00	EACH
0280	30078	WELDED WIRE FABRIC - (BREATHITT)	45,000.00	SQFT
0285	30079	MINE STRAPS - (BREATHITT)	50.00	EACH
0290	30080	TIMBER CANOPY - (BREATHITT)	1.00	EACH
0295	30081	TUNNEL PATH SURFACING - (BREATHITT)	850.00	LF
0300	02568	MOBILIZATION	1.00	LS
0305	02569	DEMOBILIZATION	1.00	LS

## **MATERIAL SUMMARY**

CONTRACT ID: 151224	STPE 6000 (031)	DE077DAWK1524
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CARVER TUNNEL (MAGOFFIN COUNTY) DAWKINS TRAIL PHASE 3: CARVER TUNNEL REHAB & LIGHTING IN MAGOFFIN COUNTY TUNNELS, A DISTANCE OF .7 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00464	CULVERT PIPE-24 IN	30.00	LF
0010	01002	PERFORATED PIPE-8 IN	3,500.00	LF
0015	01034	PERF PIPE HEADWALL TY 4-8 IN	4.00	EACH
0020	02237	DITCHING	1,000.00	LF
0025	02483	CHANNEL LINING CLASS II	50.00	TON
0030	02545	CLEARING AND GRUBBING - (UNKNOWN ACREAGE)	1.00	LS
0035	02599	FABRIC-GEOTEXTILE TYPE IV	2,000.00	SQYD
0040	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0045	02726	STAKING	1.00	LS
0050	05950	EROSION CONTROL BLANKET	300.00	SQYD
0055	05985	SEEDING AND PROTECTION	10,000.00	SQYD
0060	06406	SBM ALUM SHEET SIGNS .080 IN	84.75	SQFT
0065	06410	STEEL POST TYPE 1	176.00	LF
0070	06517	PAVE STRIPING-PERM PAINT-12 IN	200.00	LF
0075	21341ND	BOLLARDS - (GATE TYPE)	4.00	EACH
0800	21415ND	EROSION CONTROL	1.00	LS
0085	04761	LIGHTING CONTROL EQUIPMENT	1.00	EACH
0090	04791	CONDUIT-3/4 IN	384.00	LF
0095	04792	CONDUIT-1 IN	792.00	LF
0100	04810	ELECTRICAL JUNCTION BOX	10.00	EACH
0105	04820	TRENCHING AND BACKFILLING	100.00	LF
0110	04832	WIRE-NO. 12	5,645.00	LF
0115	04833	WIRE-NO. 8	6,100.00	LF
0120	04871	POLE 35 FT WOODEN	1.00	EACH
0125	04884	ANCHOR	1.00	EACH
0130	21563NN	SPLICE BOX - (8' X 6' 4')	10.00	EACH
0135	24750EC	LED TUNNEL LUMINAIRE	94.00	EACH
0140	30082	MOTION SENSOR	10.00	EACH
0145	30075	PORTAL CLEANING & SCALING - (MAGOFFIN)	2,350.00	SQFT
0150	30076	TUNNEL INTERIOR PREPARATION - (MAGOFFIN)	750.00	LF
0155	30077	ROCK DOWELS - (7 FEET LONG, MAGOFFIN)	1,800.00	EACH
0160	30077	ROCK DOWELS - (10 FEET LONG, MAGOFFIN)	200.00	EACH
0165		WELDED WIRE FABRIC - (MAGOFFIN)	45,000.00	SQFT
0170	30079	MINE STRAPS - (MAGOFFIN)	50.00	EACH
0175	30080	TIMBER CANOPY - (MAGOFFIN)	1.00	EACH
0180	30081	TUNNEL PATH SURFACING - (MAGOFFIN)	850.00	LF
0185	02568	MOBILIZATION	1.00	LS
0190	02569	DEMOBILIZATION	1.00	LS

### SPECIAL NOTE FOR PRE-BID CONFERENCE

### MAGOFFIN/BREATHITT COUNTIES 12-3011.50

### **Dawkins Trail – Carver Tunnel Rehabilitation**

The Department will conduct a mandatory Pre-Bid Conference and Field Review of the subject project on May 14, 2015 at 1:00 pm EDT at:

Magoffin Maintenance Garage 68 Jim Arnett Branch Road Salyersville, KY 606-349-3215

Any entity interested in bidding on this project or being part of a joint venture must be represented at the conference and field review by at least <u>one person with sufficient</u> <u>authority to bind the company.</u> No individual may represent more than one company. The pre-bid conference will be followed by a mandatory field review at the project site. A roster will be taken of the representatives present at **both** the conference and field review. Only companies represented at the <u>conference and field review</u> will be eligible to have their bids opened at the date of letting.

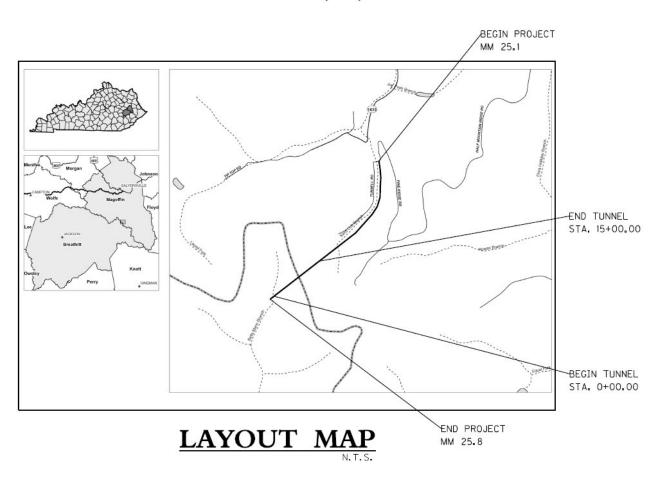
The purpose of the conference and field review is to familiarize prospective bidders with contract requirements and the location and condition of the features within the scope of the Contract.

Department of Highways representatives present at the conference and field review will answer questions concerning the project. The field review is not intended for bid estimation or submittal of proposals. Walking (up to ½ mile) may be required to access the portals. Special assistance may be possible with prior notification.

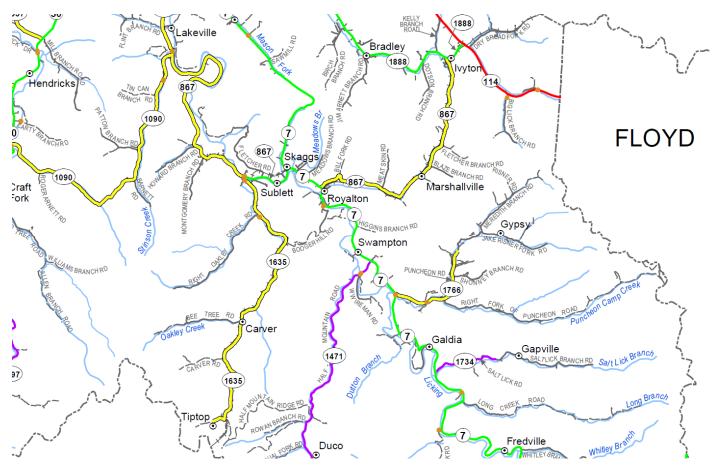
Special Note For Pre-Bid Conference Carver Tunnel

## **CARVER TUNNEL**

### MAGOFFIN / BREATHITT COUNTIES STPE 6000(031)



## Special Note For Pre-Bid Conference Carver Tunnel



Maintenance Barn is near Bradley. Carver Tunnel is near Tiptop.

### **PART II**

### SPECIFICATIONS AND STANDARD DRAWINGS

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2012 with the 2012 Revision.

<b>Subsection:</b>	102.15 Process Agent.			
<b>Revision:</b>	Replace the 1st paragraph with the following:			
	Every corporation doing business with the Department shall submit evidence of compliance with			
	KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-			
	220, and file with the Department the name and address of the process agent upon whom process			
	may be served.			
<b>Subsection:</b>	105.13 Claims Resolution Process.			
<b>Revision:</b>	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer			
	available through the forms library and are forms generated within the AASHTO SiteManager			
	software.			
	108.03 Preconstruction Conference.			
<b>Revision:</b>	Replace 8) Staking with the following:			
	8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the			
	Commonwealth of Kentucky.			
	109.07.02 Fuel.			
<b>Revision:</b>	Revise item Crushed Aggregate Used for Embankment Stabilization to the following:			
	Crushed Aggregate			
	Used for Stabilization of Unsuitable Materials			
	Used for Embankment Stabilization			
	Delete the following item from the table.			
	Crushed Sandstone Base (Cement Treated)			
	110.02 Demobilization.			
Revision:	Replace the first part of the first sentence of the second paragraph with the following:			
	Perform all work and operations necessary to accomplish final clean-up as specified in the first			
	paragraph of Subsection 105.12;			
<b>Subsection:</b>	112.03.12 Project Traffic Coordinator (PTC).			
<b>Revision:</b>	Replace the last paragraph of this subsection with the following:			
	Ensure the designated PTC has sufficient skill and experience to properly perform the task			
	assigned and has successfully completed the qualification courses.			
	112.04.18 Diversions (By-Pass Detours).			
<b>Revision:</b>	Insert the following sentence after the 2nd sentence of this subsection.			
	The Department will not measure temporary drainage structures for payment when the contract			
	documents provide the required drainage opening that must be maintained with the diversion.			
	The temporary drainage structures shall be incidental to the construction of the diversion. If the			
	contract documents fail to provide the required drainage opening needed for the diversion, the			
	cost of the temporary drainage structure will be handled as extra work in accordance with section			
	109.04.			
	201.03.01 Contractor Staking.			
<b>Revision:</b>	Replace the first paragraph with the following: Perform all necessary surveying under the			
	general supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth			
	of Kentucky.			

Subsection	201.04.01 Contractor Staking.				
	Replace the last sentence of the paragraph with the following: Complete the general layout of				
KCVISIOII.	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the				
	Commonwealth of Kentucky.				
Subsection	206.04.01 Embankment-in-Place.				
	Replace the fourth paragraph with the following: The Department will not measure <b>suitable</b>				
Kevision.	excavation included in the original plans that is disposed of for payment and will consider it				
	incidental to Embankment-in-Place.				
Subsections	incidental to Embankment-in-Place.  208.02.01 Cement.				
	208.02.01 Cement. Replace paragraph with the following:				
Kevision.	Select Type I or Type II cement conforming to Section 801. Use the same type cement				
	throughout the work.				
Subsections	208.03.06 Curing and Protection.				
	Replace the fourth paragraph with the following:				
Kevision.	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured				
	for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day				
	consists of a continuous 24-hour period in which the ambient air temperature does not fall below				
	40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7)				
	, 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit				
	before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department				
	may allow a shortened curing period when the Contractor requests. The Contractor shall give the				
	Department at least 3 day notice of the request for a shortened curing period. The Department				
	will require a minimum of 3 curing days after final compaction. The Contractor shall furnish cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened				
	curing time is requested. The Department will test cores using an unconfined compression test.				
	Roadbed cores must achieve a minimum strength requirement of 80 psi.				
Subsections	208.03.06 Curing and Protection.				
	Replace paragraph eight with the following:				
Kevision.	At no expense to the Department, repair any damage to the subgrade caused by freezing.				
Subsection	212.03.03 Permanent Seeding and Protection.				
Part:	A) Seed Mixtures for Permanent Seeding.				
Revision:	Revise <b>Seed Mix Type I</b> to the mixture shown below:				
KCVISIOII.	50% Kentucky 31 Tall Fescue (Festuca arundinacea)				
	35% Hard Fescue (Festuca longifolia)				
	10% Ryegrass, Perennial (Lolium perenne)				
	5% White Dutch Clover (Trifolium repens)				
Subsection:	212.03.03 Permanent Seeding and Protection.				
Part:	A) Seed Mixtures for Permanent Seeding.				
Number:	A) Seed Mixtures for Permanent Seeding. 2)				
	Replace the paragraph with the following:				
110,1010111	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed				
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course				
	replace the crown vetch with Kentucky 31 Tall Fescue.				

G 1	212.22.22.2			
	212.03.03 Permanent Seeding and Protection.  A) Seed Mixtures for Permanent Seeding.			
Part:	A) Seed Mixtures for Permanent Seeding.			
Number:	[3]			
<b>Revision:</b>	Replace the paragraph with the following:			
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12.			
	Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to			
	crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.			
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.			
Part:	B) Procedures for Permanent Seeding.			
Revision:	Delete the first sentence of the section.			
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.			
Part:	B) Procedures for Permanent Seeding.			
<b>Revision:</b>	Replace the second and third sentence of the section with the following:			
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of			
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural			
	limestone to the seedbed when the Engineer determines it is needed. When required, place			
	agricultural limestone at a rate of 3 tons per acre.			
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.			
Part:	D) Top Dressing.			
<b>Revision:</b>	Change the title of part to D) Fertilizer.			
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.			
Part:	D) Fertilizer.			
<b>Revision:</b>	Replace the first paragraph with the following:			
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use			
	fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the			
	seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10			
	fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000			
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply			
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional			
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of			
	an excessive application of fertilizer at no cost to the Department.			
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.			
Part:	D) Fertilizer.			
Revision:	Delete the second paragraph.			
<b>Subsection:</b>	212.04.04 Agricultural Limestone.			
<b>Revision:</b>	Replace the entire section with the following:			
	The Department will measure the quantity of agricultural limestone in tons.			
<b>Subsection:</b>	212.04.05 Fertilizer.			
<b>Revision:</b>	Replace the entire section with the following:			
	The Department will measure fertilizer used in the seeding or sodding operations for payment.			
	The Department will measure the quantity by tons.			
-				

<b>Subsection:</b>	212.05 PAYMENT.					
Revision:	Delete the following item code:					
	Code Pay Item Pay Unit					
	05966 Topdressing Fertilizer Ton					
<b>Subsection:</b>	212.05 PAYMENT.					
<b>Revision:</b>	Add the following pay items:					
	Code Pay Item Pay Unit					
	05963 Initial Fertilizer Ton					
	05964 20-10-10 Fertilizer Ton					
	05992 Agricultural Limestone Ton					
<b>Subsection:</b>	213.03.02 Progress Requirements.					
<b>Revision:</b>	Replace the last sentence of the third paragraph with the following:					
	Additionally, the Department will apply a penalty equal to the liquidated damages when all					
	aspects of the work are not coordinated in an acceptable manner within 7 calendar days after					
	written notification.					
	213.03.05 Temporary Control Measures.					
Part:	E) Temporary Seeding and Protection.					
Revision:	Delete the second sentence of the first paragraph.					
	304.02.01 Physical Properties.					
Table:	Required Geogrid Properties					
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.					
	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	B) Sampling.					
Revision:	Replace the second sentence with the following:					
	The Department will determine when to obtain the quality control samples using the random-					
	number feature of the mix design submittal and approval spreadsheet. The Department will					
	randomly determine when to obtain the verification samples required in Subsections 402.03.03 and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.					
<b>Subsection:</b>	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	D) Testing Responsibilities.					
Number:	3) VMA.					
Revision:						
ic vision.	Add the following paragraph below Number 3) VMA:					
	Retain the AV/VMA specimens and one additional corresponding G <sub>mm</sub> sample for 5 working					
	days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture					
	sample for 5 working days for mixture verification testing by the Department. When the Department's test results do not verify that the Contractor's quality control test results are within					
	the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens					
	from the affected sublot(s) for the duration of the project.					
<b>Subsection:</b>	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	D) Testing Responsibilities.					
Number:	4) Density.					
Revision:	Replace the second sentence of the Option A paragraph with the following:					
	Perform coring by the end of the following work day.					

**Subsection:** 402.03.02 Contractor Quality Control and Department Acceptance.

Part: D) Testing Responsibilities.

**Number:** 5) Gradation.

**Revision:** Delete the second paragraph.

**Subsection:** 402.03.02 Contractor Quality Control and Department Acceptance.

Part: H) Unsatisfactory Work. Number: 1) Based on Lab Data.

**Revision:** Replace the second paragraph with the following:

When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05.

**Subsection:** 402.03.03 Verification.

**Revision:** Replace the first paragraph with the following:

**402.03.03 Mixture Verification.** For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.

**Subsection:** 402.03.03 Verification.

**Part:** A) Evaluation of Sublot(s) Verified by Department.

**Revision:** Replace the third sentence of the second paragraph with the following:

When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

**Subsection:** 402.03.03 Verification.

**Part:** B) Evaluation of Sublots Not Verified by Department.

**Revision:** Replace the third sentence of the first paragraph with the following:

When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.

<b>Subsection:</b>	402.03.03 Verification.				
Part:	B) Evaluation of Sublots Not Verified by Department.				
Revision:	Replace the third sentence of the second paragraph with the following:				
	When the $F$ -test or $t$ -test indicates that the Contractor's data and Department's data are possibly				
	not from the same population, the Department will investigate the cause for the difference				
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems				
	appropriate.				
<b>Subsection:</b>	402.03.03 Verification.				
Part:	C) Test Data Patterns.				
Revision:	Replace the second sentence with the following:				
	When patterns indicate substantial differences between the verified and non-verified sublots, the				
	Department will perform further comparative testing according to subsection 402.03.05.				
<b>Subsection:</b>	402.03 CONSTRUCTION.				
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.				
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the				
	Department will obtain an additional verification sample at random using the Asphalt Mixture				
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and				
	Department's laboratory testing equipment and technicians. The Department will obtain a				
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it				
	according to AASHTO R 47. The Department will retain one split portion of the sample and				
	provide the other portion to the Contractor. At a later time convenient to both parties, the				
	Department and Contractor will simultaneously reheat the sample to the specified compaction				
	temperature and test the mixture for AV and VMA using separate laboratory equipment				
	according to the corresponding procedures given in Subsection 402.03.02. The Department will				
	evaluate the differences in test results between the two laboratories. When the difference				
	between the results for AV or VMA is not within $\pm 2.0$ percent, the Department will investigate				
	and resolve the discrepancy according to Subsection 402.03.05.				
Subsection:	402.03.04 Dispute Resolution.				
Revision:	Change the subsection number to 402.03.05.				
<b>Subsection:</b>	402.05 PAYMENT.				
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures				
Table:	AC				
<b>Revision:</b>	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.				
<b>Subsection:</b>	403.02.10 Material Transfer Vehicle (MTV).				
Revision:	Replace the first sentence with the following:				
	In addition to the equipment specified above, provide a MTV with the following minimum				
	characteristics:				
<b>Subsection:</b>	412.02.09 Material Transfer Vehicle (MTV).				
Revision:	Replace the paragraph with the following:				
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.				

<b>Subsection:</b>	412.03.07 Placement and Compaction.	
<b>Revision:</b>	Replace the first paragraph with the following:	
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps	
	and/or shoulders unless specified in the contract. When the Engineer determines the use of the	
	MTV is not practical for a portion of the project, the Engineer may waive its requirement for that	
	portion of pavement by a letter documenting the waiver.	
<b>Subsection:</b>	412.04 MEASUREMENT.	
<b>Revision:</b>	Add the following subsection:	
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for	
	payment and will consider its use incidental to the asphalt mixture.	
<b>Subsection:</b>	501.03.19 Surface Tolerances and Testing Surface.	
Part:	B) Ride Quality.	
<b>Revision:</b>	Add the following to the end of the first paragraph:	
	The Department will specify if the ride quality requirements are Category A or Category B when	
	ride quality is specified in the Contract. Category B ride quality requirements shall apply when	
	the Department fails to classify which ride quality requirement will apply to the Contract.	
<b>Subsection:</b>	603.03.06 Cofferdams.	
<b>Revision:</b>	Replace the seventh sentence of paragraph one with the following:	
	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of	
	Kentucky.	
<b>Subsection:</b>	605.03.04 Tack Welding.	
Revision:	Insert the subsection and the following:	
	605.03.04 Tack Welding. The Department does not allow tack welding.	
<b>Subsection:</b>	606.03.17 Special Requirements for Latex Concrete Overlays.	
Part:	A) Existing Bridges and New Structures.	
Number:	1) Prewetting and Grout-Bond Coat.	
<b>Revision:</b>	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge	
	decks prepared by hydrodemolition.	
	609.03 Construction.	
Revision:	Replace Subsection 609.03.01 with the following:	
	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast	
	concrete release the temporary erection supports under the bridge and swing the span free on its	
	supports.	
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam	
	is placed in the final location and prior to placing steel reinforcement. At locations where lift	
	loops are cut, paint the top of the beam with galvanized or epoxy paint.	
<b>Subsection:</b>	611.03.02 Precast Unit Construction.	
Revision:	Replace the first sentence of the subsection with the following:	
	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for	
	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with	
	KY Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605 with the following	
	exceptions and additions:	

Subsection:	613.03.01 Design.				
Number:	2)				
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD				
Kevisiuii.	Bridge Design Specifications"				
Subsection:	615.06.02				
<b>Revision:</b>	Add the following sentence to the end of the subsection.				
	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled 34 inch.				
G l · · · · · ·					
	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.				
Revision:	Replace the reference of 6.6 in the section to 615.06.06.				
Subsection:	615.06.04 Placement of Reinforcement for Precast Endwalls.				
Revision:	Replace the reference of 6.7 in the section to 615.06.07.				
Subsection:	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.				
Revision:	Replace the subsection with the following:				
	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be				
	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall				
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO				
	2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall				
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO				
	2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured				
	between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars,				
	the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section				
	5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded				
	wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires				
	in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing				
	center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to				
	center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be				
	not more than 16 inches.				
<b>Subsection:</b>	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.				
Revision:	Replace the subsection with the following:				
	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for				
	assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of				
	AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design				
	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the				
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012				
	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the				
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-				
	center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.				
	of the more blood blant hot of less than 2 mones of more than 6 mones.				

	615.08.01 Type of Test Specimen.				
	Replace the subsection with the following:				
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on the				
	first batch of concrete. Acceptable start-up results are required for production of the first unit.				
	After the first unit has been established, random acceptance testing is performed daily for each				
4	50 yd <sup>3</sup> (or fraction thereof). In addition to the slump, air content, unit weight, and temperature				
	tests, a minimum of one set of cylinders shall be required each time plastic property testing is				
ļ	performed.				
Subsection: (	615.08.02 Compression Testing.				
Revision:	Delete the second sentence.				
Subsection: (	615.08.04 Acceptability of Core Tests.				
Revision:	Delete the entire subsection.				
Subsection: (	615.12 Inspection.				
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the				
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the				
l	production facility. Units shall be inspected upon arrival for any evidence of damage resulting				
f	from transport to the jobsite.				
Subsection: 7	716.02.02 Paint.				
Revision:	Replace sentence with the following: Conform to Section 821.				
<b>Subsection:</b> 7	716.03 CONSTRUCTION.				
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural				
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current				
i	interims,				
Subsection:	716.03.02 Lighting Standard Installation.				
Revision:	Replace the second sentence with the following:				
]	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum				
(	of four feet from the front face of the guardrail to the front face of the pole base.				
Subsection: 7	716.03.02 Lighting Standard Installation.				
Part:	A) Conventional Installation.				
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is				
	positioned on the side away from on-coming traffic.				
	716.03.02 Lighting Standard Installation.				
	A) Conventional Installation.				
	1) Breakaway Installation and Requirements.				
	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of				
	the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires,				
	and Traffic Signals, 2013-6th Edition with current interims.				
Subsection:	716.03.02 Lighting Standard Installation.				
	B) High Mast Installation				
Revision:	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans.				
Revision: I Subsection: 7	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans. 716.03.02 Lighting Standard Installation.				
Revision: I Subsection: 7 Part: I	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans. 716.03.02 Lighting Standard Installation. B) High Mast Installation				
Revision: I Subsection: 7 Part: I Number: 2	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans. 716.03.02 Lighting Standard Installation.				

Drilled Shaft Depth Data							
		3:1 Ground		2:1 Ground		1.5:1 Ground	
Level Ground		Slope		Slope		Slo	pe <sup>(2)</sup>
Soil	Rock	Soil Rock		Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft	7 ft	20 ft	7 ft	(1)	7 ft

Steel Requirements Vertical Bars Ties or Spiral Spacing or Size Total Size Pitch #4 #10 16

- (1): Shaft length is 22' for cohesive soil only. For cohesionless soil, contact geotechnical branch for design.
- (2): Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic.

If rock is encountered during drilling operations and confirmed by the engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted accordingly.

If a shorter depth is desired for the drilled shaft, the contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and onehalf closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the geotechnical branch if such conditions are encountered.

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

**Subsection:** 716.03.03 Trenching.

Part:

A) Trenching of Conduit for Highmast Ducted Cables.

**Revision:** 

Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

Subsection:	716.03.03 Trenching.			
Part:	B) Trenching of Conduit for Non-Highmast Cables.			
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for			
ic vision.	either situation listed previously, obtain the Engineer's approval and maintain the required			
	conduit depths coming into the junction boxes. No payment for additional junction boxes for			
	greater depths will be allowed.			
Subsection:	716.03.10 Junction Boxes.			
Revision:	Replace subsection title with the following: Electrical Junction Box.			
Subsection:	716.04.07 Pole with Secondary Control Equipment.			
Revision:	Replace the paragraph with the following:			
Kevision.	The Department will measure the quantity as each individual unit furnished and installed. The			
	Department will not measure mounting the cabinet to the pole, backfilling, restoration, any			
	necessary hardware to anchor pole, or electrical inspection fees, and will consider them			
	incidental to this item of work. The Department will also not measure furnishing and installing			
	electrical service conductors, specified conduits, meter base, transformer, service panel, fused			
	cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch,			
	ground rods, and ground wires and will consider them incidental to this item of work.			
Subsections				
Revision:	716.04.08 Lighting Control Equipment.			
Revision:	Replace the paragraph with the following:  The Department will measure the quantity as each individual unit furnished and installed. The			
	Department will not measure constructing the concrete base, excavation, backfilling, restoration,			
	any necessary anchors, or electrical inspection fees, and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service.			
	of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses,			
	lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, and ground wires and will consider them incidental to this item of work.			
Subsection:	716.04.09 Luminaire.			
Revision:	Replace the first sentence with the following:			
Revision:	The Department will measure the quantity as each individual unit furnished and installed.			
<b>Subsection:</b>	716.04.10 Fused Connector Kits.			
Revision:	Replace the first sentence with the following:			
Revision:	The Department will measure the quantity as each individual unit furnished and installed.			
<b>Subsection:</b>	716.04.13 Junction Box.			
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.			
-	716.04.13 Junction Box.			
Part:	A) Junction Electrical.			
Revision:	Rename A) Junction Electrical to the following: A) Electrical Junction Box.			
Subsection:	716.04.14 Trenching and Backfilling.			
Revision:	Replace the second sentence with the following:			
IXCVISIUII.	The Department will not measure excavation, backfilling, underground utility warning tape (if			
	required), the restoration of disturbed areas to original condition, and will consider them			
	incidental to this item of work.			
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	716.04.18 Remove Lighting.						
Revision:	Replace the paragraph with the following:						
	The Department will measure the quantity as a lump sum for the removal of lighting equipment.						
		The Department will not measure the disposal of all equipment and materials off the project by					
	the contractor. The Department also will not measure the transportation of the materials and w	ill					
	consider them incidental to this item of work.						
	716.04.20 Bore and Jack Conduit.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear						
	feet. This item shall include all work necessary for boring and installing conduit under an						
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,						
	paragraphs 1, 2, and 4.						
<b>Subsection:</b>	716.05 PAYMENT.						
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>						
	<u>Unit</u> with the following:						
	<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u>						
	04810 Electrical Junction Box Each						
	04811 Electrical Junction Box Type B Each						
	20391NS835 Electrical Junction Box Type A Each						
	20392NS835 Electrical Junction Box Type C Each						
<b>Subsection:</b>	723.02.02 Paint.						
Revision:	Replace sentence with the following: Conform to Section 821.						
	723.03 CONSTRUCTION.						
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural						
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current						
	interims,						
	723.03.02 Poles and Bases Installation.						
Revision:	Replace the first sentence with the following:						
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum						
	of four feet from the front face of the guardrail to the front face of the pole base.						
	723.03.02 Poles and Bases Installation.						
Part:	A) Steel Strain and Mastarm Poles Installation						
Revision:	Replace the second paragraph with the following: For concrete base installation, see Section						
	716.03.02, B), 2), Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions						
G 1 (1	encountered during drilling and slope condition at the site. Refer to the design chart below:						
	723.03.02 Poles and Bases Installation.						
Part:	B) Pedestal or Pedestal Post Installation.						
Revision:	Replace the fourth sentence of the paragraph with the following: For breakaway supports,						
	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for						
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.						

Subsection:	723.03.03 Trenching.			
Part:	A) Under Roadway.			
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary,			
	obtain the Engineer's approval and maintain ether required conduit depths coming into the			
	junction boxes. No payment for additional junction boxes for greater depths will be allowed.			
	723.03.11 Wiring Installation.			
<b>Revision:</b>	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of			
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.			
	723.03.12 Loop Installation.			
	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of			
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.			
	723.04.02 Junction Box.			
	Replace subsection title with the following: Electrical Junction Box Type Various.			
	723.04.03 Trenching and Backfilling.			
Revision:	Replace the second sentence with the following: The Department will not measure excavation,			
	backfilling, underground utility warning tape (if required), the restoration of disturbed areas to			
C14:	original condition, and will consider them incidental to this item of work.			
	723.04.10 Signal Pedestal.			
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure excavation,			
	concrete, reinforcing steel, specified conduits, fittings, ground rod, ground wire, backfilling, restoring disturbed areas, or other necessary hardware and will consider them incidental to this			
	item of work.			
Subsection	723.04.15 Loop Saw Slot and Fill.			
	Replace the second sentence with the following: The Department will not measure sawing,			
Kevision.	cleaning and filling induction loop saw slot, loop sealant, backer rod, and grout and will consider			
	them incidental to this item of work.			
Subsection:				
	Replace the paragraph with the following: The Department will measure the quantity as each			
TTC VISIOII	individual unit furnished, installed and connected to pole/pedestal. The Department will not			
	measure installing R10-3e (with arrow) sign, furnishing and installing mounting hardware for			
	sign and will consider them incidental to this item of work.			
<b>Subsection:</b>	Ü			
	will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian			
	isolators, load switches, model 400 modem card; furnishing and installing electrical service			
	conductors, specified conduits, anchors, meter base, fused cutout, fuses, ground rods, ground			
	wires and will consider them incidental to this item of work.			
	723.04.18 Signal Controller- Type 170.  Replace the second sentence with the following: The Department will not measure constructing the concrete base or mounting the cabinet to the pole, connecting the signal and detectors, excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, or electrical inspection fees and will consider them incidental to this item of work. The Department will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian isolators, load switches, model 400 modem card; furnishing and installing electrical service conductors, specified conduits, anchors, meter base, fused cutout, fuses, ground rods, ground			

Subsection	723.04.20 Install Signal Controller - Type 170.						
Revision:	- · · · · · · · · · · · · · · · · · · ·						
Kevision.	Replace the paragraph with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure constructing the concrete base or						
	individual unit installed. The Department will not measure constructing the concrete base or						
	mounting the cabinet to the pole, connecting the signal and detectors, and excavation,						
	backfilling, restoration, any necessary pole mounting hardware, electric service, or electrical						
	inspection fees and will consider them incidental to this item of work. The Department will also						
	not measure connecting the induction loop amplifiers, pedestrian, isolators, load switches, model						
	400 modem card; furnishing and installing electrical service conductors, specified conduits,						
	anchors, meter base, fused cutout, fuses, ground rods, ground wires and will consider them incidental to this item of work.						
Cubaaatian							
	723.04.22 Remove Signal Equipment.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity as a lump						
	sum removal of signal equipment. The Department will not measure the return of control						
	equipment and signal heads to the Department of Highways as directed by the District Traffic						
	Engineer. The Department also will not measure the transportation of materials of the disposal						
	of all other equipment and materials off the project by the contractor and will consider them						
G 1 4°	incidental to this item of work.						
	723.04.28 Install Pedestrian Detector Audible.						
Revision:	Replace the second sentence with the following: The Department will not measure installing sign						
G 1 4	R10-3e (with arrow) and will consider it incidental to this item of work.						
	723.04.29 Audible Pedestrian Detector.						
Revision:	Replace the second sentence with the following: The Department will not measure furnishing						
	and installing the sign R10-3e (with arrow) and will consider it incidental to this item of work.						
	723.04.30 Bore and Jack Conduit.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear						
	feet. This item shall include all work necessary for boring and installing conduit under an						
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,						
	paragraphs 1, 2, and 4.						
	723.04.31 Install Pedestrian Detector.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each						
	individual unit installed and connected to pole/pedestal. The Department will not measure						
	installing sign R 10-3e (with arrow) and will consider it incidental to this item of work.						
	723.04.32 Install Mast Arm Pole.						
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure arms, signal						
	mounting brackets, anchor bolts, or any other necessary hardware and will consider them						
	incidental to this item of work.						
	723.04.33 Pedestal Post.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
	concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, backfilling						
	restoration, or any other necessary hardware and will consider them incidental to this item of						
	work.						

Subsection:	723.04.36 Traffic Signal Pole Base.					
	1					
Revision.	Replace the second sentence with the following: The Department will not measure excavation, reinforcing steel anchor bolts specified conduits ground rods ground wires backfilling or					
	reinforcing steel, anchor bolts, specified conduits, ground rods, ground wires, backfilling, or restoration and will consider them incidental to this item of work.					
Subsection	723.04.37 Install Signal Pedestal.					
	Replace the second sentence with the following: The Department will not measure excavati	ion				
Kevision:						
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,					
	backfilling, restoration, or any other necessary hardware and will consider them incidental to the item of work.					
Cubaasian						
	723.04.38 Install Pedestal Post.					
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure excavation,					
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,					
	backfilling, restoration, or any other necessary hardware and will consider them incidental to this					
	item of work.					
	723.05 PAYMENT.  Perdoon items 04810 04811 20201NS825 and 20202NS825 under Code Pay Items and Pay					
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under Code, Pay Item, and Pay					
	<u>Unit</u> with the following:					
	Code Pay Item Pay Unit					
	CodePay ItemPay Unit04810Electrical Junction BoxEach					
	<b>7</b> 1					
	*1					
Cubaatian	71					
	804.01.02 Crushed Sand. Delete lest contends of the section					
	Delete last sentence of the section.					
	804.01.06 Slag.					
Revision:	Add subsection and following sentence.					
	Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only in applications					
	in asphalt surface applications.					
	804.04 Asphalt Mixtures.					
<b>Revision:</b>	Replace the subsection with the following:  Provide natural, crushed, conglomerate, or blest furness also and, with the addition of filler as					
	Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of filler necessary, to meet gradation requirements. The Department will allow any combination of natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved to					
	<u> </u>	using				
Cubaatian	cold feeds at the plant. The Engineer may allow other fine aggregates.					
	806.03.01 General Requirements.					
176 A 121011;	Replace the second sentence of the paragraph with the following:	ordina				
	Additionally, the material must have a minimum solubility of 99.0 percent when tested according to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a $J_{NR}$ (nonrecoverable creep compliance) between 0.1 and 0.5, when tested according to AASHTO T 70.					

Table: Revision:  PG Binder Requirements and Price Adjustment Schedule Replace the Elastic Recovery, % (3) (AASHTO T301) and all corresponding values in the table with the following:  Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay (ASHTO TP 70)  Subsection:  806.03.01 General Requirements PG Binder Requirements and Price Adjustment Schedule Superscript: (3) Revision: Perform testing at 64°C.  Subsection: 813.04 Gray Iron Castings. Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: Number: A) Bolts. Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: Revision: 814.04.02 Timber Guardrail Posts. Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts. Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.
with the following:  Test Specification MSCR recovery, % (3) 60 Min. ≥58 56 55 54 √53  (AASHTO TP 70)  Subsection:  Table: PG Binder Requirements and Price Adjustment Schedule Superscript: (3) Revision: Replace (3) with the following: Perform testing at 64°C.  Subsection: 813.04 Gray Iron Castings. Revision: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: Number: A) Bolts.  Revision: Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: Revision:  814.04.02 Timber Guardrail Posts. Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts. Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.
Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50%Pay(1)  MSCR recovery, % (3) 60 Min. ≥58 56 55 54 <53  (AASHTO TP 70)  Subsection: 806.03.01 General Requirements.  Table: PG Binder Requirements and Price Adjustment Schedule  Superscript: (3)  Revision: Replace (3) with the following: Perform testing at 64°C.  Subsection: 813.04 Gray Iron Castings.  Revision: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: Number: A) Bolts.  Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: 814.04.02 Timber Guardrail Posts.  Revision: Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: 814.04.02 Timber Guardrail Posts.  Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts.
MSCR recovery, % (3) 60 Min. ≥58 56 55 54 <53 (AASHTO TP 70)  Subsection:  Table: PG Binder Requirements and Price Adjustment Schedule Superscript: (3) Revision: Replace (3) with the following: Perform testing at 64°C.  Subsection: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: Number: A) Bolts. Revision: Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: 814.04.02 Timber Guardrail Posts. Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: Revision: Revision: Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts. Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.
CAASHTO TP 70
Table: Superscript: (3)  Revision: Replace (3) with the following: Perform testing at 64°C.  Subsection: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: 813.09.02 High Strength Steel Bolts, Nuts, and Washers.  Number: A) Bolts.  Revision: Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: 814.04.02 Timber Guardrail Posts.  Revision: Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: Revision: Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts.
Superscript: (3) Revision: Replace (3) with the following: Perform testing at 64°C.  Subsection: Revision: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: 813.09.02 High Strength Steel Bolts, Nuts, and Washers.  Number: A) Bolts.  Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: 814.04.02 Timber Guardrail Posts.  Revision: Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts.
Revision: Replace (3) with the following: Perform testing at 64°C.  Subsection: 813.04 Gray Iron Castings. Revision: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: 813.09.02 High Strength Steel Bolts, Nuts, and Washers. Number: A) Bolts.  Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: 814.04.02 Timber Guardrail Posts. Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: Revision: Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts.
Perform testing at 64°C.  Subsection: 813.04 Gray Iron Castings. Revision: Replace the reference to "AASHTO M105" with "ASTM A48".  Subsection: 813.09.02 High Strength Steel Bolts, Nuts, and Washers.  Number: A) Bolts.  Revision: Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.  Subsection: 814.04.02 Timber Guardrail Posts.  Revision: Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".  Subsection: 814.04.02 Timber Guardrail Posts. Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.  Subsection: 814.04.02 Timber Guardrail Posts.
<ul> <li>Subsection: Revision: Replace the reference to "AASHTO M105" with "ASTM A48".</li> <li>Subsection: 813.09.02 High Strength Steel Bolts, Nuts, and Washers.</li> <li>Number: A) Bolts.</li> <li>Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.</li> <li>Subsection: 814.04.02 Timber Guardrail Posts.</li> <li>Revision: Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".</li> <li>Subsection: Revision: Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.</li> <li>Subsection: 814.04.02 Timber Guardrail Posts.</li> </ul>
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<b>Revision:</b> Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph
4.1".
Subsection: 814.04.02 Timber Guardrail Posts.
Revision: Delete the second sentence of the fourth paragraph.  Subsection: 814.05.02 Composite Plastic.
1
<b>Revision:</b> 1) Add the following to the beginning of the first paragraph: Select composite offset blocks
conforming to this section and assure blocks are from a manufacturer included on the Department's List of Approved Materials.
2) Delete the last paragraph of the subsection.
Subsection: 816.07.02 Wood Posts and Braces.
<b>Revision:</b> First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph
4.1".
Subsection: 816.07.02 Wood Posts and Braces.
<b>Revision:</b> Delete the second sentence of the first paragraph.
Subsection: 818.07 Preservative Treatment.
<b>Revision:</b> First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".

Subsection	834.14.03 High Mast Poles.				
Subgestion	924 14 02 High Most Poles				
Revision:	Remove the second and fourth sentence from the first paragraph.				
Subsection	834.14.03 High Mast Poles.				
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are				
	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.				
<b>Subsection:</b>	834.14.03 High Mast Poles.				
Revision:	Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the inside diameter of the exposed end of the female section. Use longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration groove weld with backup bar.  The handhole cover shall be removable from the handhole frame. One the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM A 12				
Subsection: Revision:	834.16 ANCHOR BOLTS. Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.				

Subsection:	834.17.01 Conventional.					
<b>Revision:</b>	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on					
	the bottom of the housing that is legible from the ground and indicates the wattage of the fixture					
	by providing the first two numbers of the wattage.					
<b>Subsection:</b>						
<b>Revision:</b>	Replace the last five sentences in the second paragraph with the following sentences:					
	Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean					
	metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin					
	traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and					
	utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the					
	top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex					
	receptacle in the enclosure with a separate 20 amp breaker.					
Subsection:	835.07 Traffic Poles.					
<b>Revision:</b>	Replace the first sentence of the first paragraph with the following: Pole diameter and wall					
	thickness shall be calculated in accordance with the AASHTO Standard Specifications for					
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with					
	current interims.					
<b>Subsection:</b>	835.07 Traffic Poles.					
<b>Revision:</b>	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates					
	have a thickness ≥ 2 inches.					
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall					
	not be less than 16.25 inches.					
<b>Subsection:</b>	835.07 Traffic Poles.					
<b>Revision:</b>	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole					
	forces shall be positioned in such a manner to maximize the force on any individual anchor bo					
	regardless of the actual anchor bolt orientation with the pole.					
<b>Subsection:</b>						
<b>Revision:</b>	Replace the first and second sentence of the sixth paragraph with the following:					
	The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable					
	from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the					
	handhole cover/frame to place the Department's standard padlock as specified in Section 834.25.					
	The handhole frame shall have two stainless studs installed opposite the hinge to secure the					
	handhole cover to the frame which includes providing stainless steel wing nuts and washers. The					
	handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and					
	have a neoprene rubber gasket that is permanently secured to the handhole frame to insure					
	weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to					
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance					
	between the transverse plate and the bottom opening of the handhole shall not be less than the					
	diameter of the bottom tube but needs to be at least 12 inches.					

	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and				
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of				
	Kentucky.				
	*Replace the third sentence of the last paragraph with the following: All tables referenced in				
	835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway				
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				
<b>Subsection:</b>	835.07.01 Steel Strain Poles.				
Revision:	Replace the second sentence of the second paragraph with the following:				
	The detailed analysis shall be certified by a Professional Engineer licensed in the Commonwealt				
	of Kentucky.				
<b>Subsection:</b>	835.07.01 Steel Strain Poles.				
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations should				
	be shown for all fatigue related connections. Provide the corresponding detail, stress category				
	and example from table 11.9.3.1-1.				
<b>Subsection:</b>	835.07.02 Mast Arm Poles.				
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis	S			
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.				
<b>Subsection:</b>	835.07.02 Mast Arm Poles.				
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations shou				
	be shown for all fatigue related connections. Provide the corresponding detail, stress category	7			
	and example from table 11.9.3.1-1.				
<b>Subsection:</b>	835.07.03 Anchor Bolts.				
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be				
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.				
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized				
	(ASTM A 153).				
	835.16.05 Optical Units.				
Revision:	Replace the 3rd paragraph with the following:				
	The list of certified products can be found on the following website: http://www.intertek.com.				
	835.19.01 Pedestrian Detector Body.				
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum				
G. L	rectangular housing that is compatible with the pedestrian detector.				
	843.01.01 Geotextile Fabric.				
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING				
Revision:	Add the following to the chart:				
	Property Minimum Value <sup>(1)</sup> Test Method				
	CBR Puncture (lbs) 494 ASTM D6241				
	Permittivity (1/s) 0.7 ASTM D4491				

<b>Subsection:</b>	843.01.01 Geotextile Fabric.				
Table:	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS				
<b>Revision:</b>	Add the following to the ch	art:			
	<u>Property</u>	Minimum Value <sup>(1)</sup>	Test Method		
	CBR Puncture (lbs)	210	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		
<b>Subsection:</b>	843.01.01 Geotextile Fabrio	2.			
Table:	TYPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION				
<b>Revision:</b>	Add the following to the chart:				
	<u>Property</u>	Minimum Value <sup>(1)</sup>	Test Method		
	CBR Puncture (lbs)	370	ASTM D6241		
	Permittivity (1/s)	0.05	ASTM D4491		
<b>Subsection:</b>	843.01.01 Geotextile Fabric.				
Table:	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND				
	PAVEMENT EDGE DRAINS				
<b>Revision:</b>	Add the following to the chart:				
	<u>Property</u>	Minimum Value <sup>(1)</sup>	Test Method		
	CBR Puncture (lbs)	309	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		
<b>Subsection:</b>	843.01.01 Geotextile Fabric.				
Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC				
<b>Revision:</b>	Make the following changes to the chart:				
	<u>Property</u>	Minimum Value <sup>(1)</sup>	Test Method		
	CBR Puncture (lbs)	618	ASTM D6241		
	Grab Strength (lbs)	700	ASTM D4632		
	Apparent Opening Size	U.S. #40 <sup>(3)</sup>	ASTM D4751		
	(3) Maximum average roll value.				

### **PART III**

### EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

#### **ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
  - "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

### 6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <a href="Form FHWA-1391">Form FHWA-1391</a>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
  - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

### 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3:
  - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

### VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

### VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

T h i s p r o v i s i o n i s applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

### IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### 1. Instructions for Certification - First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180 and 1200. "First Tier Covered
  Transactions" refers to any covered transaction between a
  grantee or subgrantee of Federal funds and a participant (such
  as the prime or general contract). "Lower Tier Covered
  Transactions" refers to any covered transaction under a First
  Tier Covered Transaction (such as subcontracts). "First Tier
  Participant" refers to the participant who has entered into a
  covered transaction with a grantee or subgrantee of Federal
  funds (such as the prime or general contractor). "Lower Tier
  Participant" refers any participant who has entered into a
  covered transaction with a First Tier Participant or other Lower
  Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180 and 1200. You may contact the person to
  which this proposal is submitted for assistance in obtaining a
  copy of those regulations. "First Tier Covered Transactions"
  refers to any covered transaction between a grantee or
  subgrantee of Federal funds and a participant (such as the
  prime or general contract). "Lower Tier Covered Transactions"
  refers to any covered transaction under a First Tier Covered
  Transaction (such as subcontracts). "First Tier Participant"
  refers to the participant who has entered into a covered
  transaction with a grantee or subgrantee of Federal funds
  (such as the prime or general contractor). "Lower Tier
  Participant" refers any participant who has entered into a
  covered transaction with a First Tier Participant or other Lower
  Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

## Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

## XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

## ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

#### KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

# EMPLOYMENT REQUIREMENTS RELATING TO NONDISCRIMINATION OF EMPLOYEES (APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

## AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT

#### KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to

provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

REVISED: 12-3-92

#### **Standard Title VI/Non-Discrimination Assurances**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts
  and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of
  Transportation, Federal Highway Administration, as they may be amended from time to time, which are
  herein incorporated by reference and made a part of this contract.
- 2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will\_not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The contractor will\_provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

#### Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

#### Contract ID: 151224 Page 114 of 135

#### **EXECUTIVE BRANCH CODE OF ETHICS**

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

#### KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

#### KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

General Decision Number: KY150123 01/02/2015 KY123

Superseded General Decision Number: KY20140123

State: Kentucky

Construction Type: Highway

Counties: Adair, Barren, Bell, Breathitt, Casey, Clay, Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, Magoffin, Martin, McCreary, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe Counties in Kentucky.

#### HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/02/2015

SUKY2013-001 12/06/2013

	Rates	Fringes
BOILERMAKER\$	24.65	12.94
BRICKLAYER  Bricklayer\$  Stone Mason\$		8.50 8.50
CARPENTER Carpenter\$ Piledriver\$		13.50 13.50
ELECTRICIAN  Equipment Operator\$  Groundsman\$  Lineman\$	17.79	10.31 8.51 10.94

When workmen are required to work from bosum chairs, trusses, stacks, tanks, scaffolds, catwalks, radio and T.V. towers, structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet,

and add 50% to workman's base rate for over 75 feet.

IRONWORKER	\$ 26.34	18.84
LABORER		

01121			
Group	1\$	21.15	11.41
Group	2\$	21.40	11.41
Group	3\$	21.45	11.41
Group	4\$	22.05	11.41

GROUP 1: Aging and Curing of Concrete (Any Mode or Method), Asbestos Abatement Worker, Asphalt Plant Laborers, Asphalt Laborers, Batch Truck Dumpers, Carpenter Tenders, Cement Mason Tenders, Cleaning of Machines, Concrete Laborers, Demolition Laborers, Dredging Laborers, Drill Tender, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste -Level D, Flagmen, Grade Checkers, All Hand Digging and Hand Back Filling, Highway Marker Placers, Landscaping Laborers, Mesh Handlers and Placers, Puddler, Railroad Laborers, Rip-rap and Grouters, Right of Way Laborers, Sign, Guard Rail and Fence Installers (All Types), Signalmen, Sound Barrier Installer, Storm and Sanitary Sewer Laborers, Swampers, Truck Spotters and Dumpers, Wrecking of Concrete Forms, General

GROUP 2: Batter Board Men (Sanitary and Storm Sewer), Brickmason Tenders, Mortar Mixer Operator, Scaffold Builders, Burner and Welder, Bushammers, Chain Saw Operator, Concrete Saw Operators, Deckhand Scow Man, Dry Cement Handlers, Environmental Laborers - Nuclear, Radiation, Toxic and Hazardous Waste - Level C, Forklift Operators for Masonry, Form Setters, Green Concrete Cutting, Hand Operated Grouter and Grinder Machine Operator, Jack Hammers, Lead Paint Abatement, Pavement Breakers, Paving Joint Machine, Pipe Layers - Laser Operators (Non-metallic), Plastic Pipe Fusion, Power Driven Georgia Buggy and Wheel Barrow, Power Post Hole Diggers, Precast Manhole Setters, Walk-behind Tampers, Walkbehind Trenchers, Sand Blasters, Concrete Chippers, Surface Grinders, Vibrator Operators, Wagon Drillers

GROUP 3: Air Track Driller (All Types), Asphalt Luteman and Rakers, Gunnite Nozzleman, Gunnite Operators and Mixers, Grout Pump Operator, Powderman and Blaster, Side Rail Setters, Rail Paved Ditches, Screw Operators, Tunnel Laborers (Free Air), Water Blasters

GROUP 4: Caisson Workers (Free Air), Cement Finishers, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level A and B, miners and Drillers (Free Air), Tunnel Blasters, and Tunnel Mockers (Free Air), Directional and Horizontal Boring, Air Track Drillers (All Types), Powder Man and Blasters, Troxler and Concrete Tester if Llaborer is Utilized

#### PAINTER

All Excluding Bridges\$	19.92	9.57
Bridges\$	23.92	10.07
PLUMBER\$	22.52	7.80

POWER EQUIPMENT OPERATOR:

Group	1\$	27.35	13.40
Group	2\$	24.87	13.40
Group	3\$	25.26	13.40
Group	4\$	24.60	13.40

GROUP 1: Auto Patrol, Batcher Plant, Bituminous Paver, Cable-Way, Clamshell, Concrete Mixer (21 cu ft or over), Concrete Pump, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching Machine, Dragline, Dredge Engineer, Elevating Grader and all types of Loaders, Hoe-type Machine, Hoisting Engine, Locomotive, LeTourneau or Carry-all Scoop, Bulldozer, Mechanic, Orangepeel Bucket, Piledriver, Power Blade, Roller (Bituminous), Roller (Earth), Roller (Rock), Scarifier, Shovel, Tractor Shovel, Truck Crane, Well Point, Winch Truck, Push Dozer, Grout Pump, High Lift, Fork Lift (regardless of lift height), all types of Boom Cats, Multiple Operator, Core Drill, Tow or Push Boat, A-Frame Winch Truck, Concrete Paver, Grade-All, Hoist, Hyster, Material Pump, Pumpcrete, Ross Carrier, Sheepfoot, Sideboom, Throttle-Valve Man, Rotary Drill, Power Generator, Mucking Machine, Rock Spreader attached to Equipment, Scoopmobile, KeCal Loader, Tower Cranes, Hydrocrane, Tugger, Backfiller Gurries, Self-propelled Compactor, Self-Contained Hydraulic Percussion Drill

GROUP 2: All Air Compressors (200 cu ft/min or greater), Bituminous Mixer, Concrete Mixer (under 212 cu ft), Welding Machine, Form Grader, Tractor (50 hp and over), Bull Float, Finish Machine, Outboard Motor Boat, Brakeman, Mechanic Tender, Whirly Oiler, Tract-air, Road Widening Trencher, Articulating Trucks

GROUP 3: Greaser on Grease Facilities servicing Heavy Equipment

SHEET METAL WORKER.....\$ 20.40

GROUP 4: Bituminous Distributor, Cement Gun, Conveyor, Mud Jack, Paving Joint Machine, Pump, Tamping Machine, Tractor (under 50 hp), Vibrator, Oiler, Air Compressor (under 200 cu ft per minute), Concrete Saw, Burlap and Curing Machine, Hydro Seeder, Power Form Handling Equipment, Deckhand Oiler, Hydraulic Post Driver

7.80

TRUCK DRIVER		
Driver (3 Tons and Over),		
Driver (Truck Mounted		
Rotary Drill)	\$ 22.99	13.50
Driver (3 Tons and Under),		
Tire Changer and Truck		
Mechanic Tender	\$ 22.78	13.50
Driver (Semi-Trailer or		
Pole Trailer), Driver		
(Dump Truck, Tandem Axle),		
Driver of Distributor	\$ 22.65	13.50
Driver on Mixer Trucks		
(All Types)	\$ 22.70	13.50
Driver on Pavement Breakers.	\$ 22.80	13.50
Driver, Euclid and Other		
Heavy Earth Moving		
Equipment and Low Boy	\$ 23.56	13.50
Driver, Winch Truck and A-		
Equipment and Low Boy	\$ 23.56	13.50

Frame when used in		
Transporting Materials\$	22.55	13.50
Greaser on Greasing		
Facilities\$	23.65	13.50
Truck Mechanic\$	22.75	13.50
Truck Tender and		
Warehouseman\$	22.45	13.50

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all

rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

\_\_\_\_\_\_

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor

200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

\_\_\_\_\_\_

END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-14-II- HWY dated July 14, 2014.

NOTE: Both Kentucky Determination No. CR-14-II-HWY and Federal Decision No. KY140123 apply to this project. Both sets of wage rates are included. If there is a difference in the two wages for the same classification, the Contractor is required to pay the higher of the two listed wages.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

#### TO: EMPLOYERS/EMPLOYEES

#### PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

#### **OVERTIME:**

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director Division of Construction Procurement Frankfort, Kentucky 40622 502-564-3500

# KENTUCKY LABOR CABINET PREVAILING WAGE DETERMINATION CURRENT REVISION HIGHWAY CONSTRUCTION LOCALITY NO. II

Determination No. CR-14-II-HWY

Project No. Highway

Date of Determination: July 14, 2014

This schedule of the prevailing rate of wages for Locality No. II including the counties of ADAIR, BARREN, BELL, BREATHITT, CASEY, CLAY, CLINTON, CUMBERLAND, ESTILL, FLOYD, GARRARD, GREEN, HARLAN, HART, JACKSON, JOHNSON, KNOTT, KNOX, LAUREL, LAWRENCE, LEE, LESLIE, LETCHER, LINCOLN, MCCREARY, MAGOFFIN, MARTIN, MENIFEE, METCALFE, MONROE, MORGAN, OWSLEY, PERRY, PIKE, POWELL, PULASKI, ROCKCASTLE, RUSSELL, TAYLOR, WAYNE, WHITLEY, and WOLFE has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-14-II-HWY.

The following schedule of rates is to be used for highway construction projects advertised or awarded by the Kentucky Transportation Cabinet. This includes any contracts for the relocation of any utilities or other incidental construction projects advertised or awarded by public authorities as a result of the highway construction project.

Apprentices or trainees shall be permitted to work in accordance with Administrative Regulations. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) hours per day, or in excess of forty (40) hours per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Anthony Russell, Commissioner Department of Workplace Standards

CLASSIFICATIONS	RATE AND FRINGE BENEFITS	
BOILERMAKERS:	BASE RATE \$24.65 FRINGE BENEFIT 12.94	
BRICKLAYERS:	***************************************	
Bricklayers:	BASE RATE \$22.90 FRINGE BENEFITS 8.50	
Stone Mason:	BASE RATE \$21.50 FRINGE BENEFITS 8.50	
CARPENTERS:		
Carpenters:	BASE RATE \$24.90 FRINGE BENEFITS 14.50	
Piledrivers:	BASE RATE \$24.55 FRINGE BENEFITS 14.50	
CEMENT MASONS:	BASE RATE \$21.25 FRINGE BENEFITS 8.50	
ELECTRICIANS:	*BASE RATE \$29.36 FRINGE BENEFITS 10.55	
*When workmen are required to work from bosum chairs, trusses, stacks, tanks, scaffolds, catwalks, radio and T.V. towers, structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to a direct fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet, and add 50% to workman's base rate for over 75 feet.		
	*BASE RATE \$30.09 FRINGE BENEFITS 10.94	
EQUIPMENT OPERATOR:	*BASE RATE \$26.90	
-	FRINGE BENEFITS 10.31	
	*BASE RATE \$17.79 FRINGE BENEFITS 8.51	
IRONWORKERS:	BASE RATE \$ 26.97 FRINGE BENEFITS 20.01	

#### Contract ID: 151224 Page 124 of 135

#### **CLASSIFICATIONS**

#### **RATE AND FRINGE BENEFITS**

#### LABORERS:

GROUP 1: Aging and curing of concrete (any mode or method), asbestos abatement worker, asphalt plant laborers, asphalt laborers; batch truck dumpers; carpenter tenders, cement mason tenders, cleaning of machines, concrete laborers, demolition laborers, dredging laborers, drill helper, environmental laborer - nuclear, radiation, toxic and hazardous waste – Level D, flagmen, grade checkers, all hand digging and hand back filling, highway marker placers, landscaping laborers, mesh handlers and placers, puddler, railroad laborers, rip-rap and grouters, right of way laborers, sign, guard rail and fence installers (all types), signalmen, sound barrier installer, storm and sanitary sewer laborers, swampers, truck spotters and dumpers, wrecking of concrete forms, general cleanup:

**HEAVY & HIGHWAY** 

BASE RATE

\$21.80

FRINGE BENEFITS

12.36

GROUP 2: Batter board men (sanitary and storm sewer), brickmason tenders, mortar mixer operator, scaffold builders, burner and welder, bushammers, chain saw operator, concrete saw operators, deckhand scow man, dry cement handlers, environmental laborers — nuclear, radiation, toxic and hazardous waste — Level C, forklift operators for masonry, form setters, green concrete cutting, hand operated grouter and grinder machine operator, jack hammers, lead paint abatement, pavement breakers, paving joint machine, pipe layers — laser operators (non-metallic), plastic pipe fusion, power driven Georgia buggy and wheel barrow, power post hole diggers, precast manhole setters, walk-behind tampers, walk-behind trenchers, sand blasters, concrete chippers, surface grinders, vibrator operators, wagon drillers:

**HEAVY & HIGHWAY** 

BASE RATE

\$22.05

FRINGE BENEFITS

12.36

GROUP 3: Air track driller (all types), asphalt luteman and rakersm gunnite nozzleman, gunnite operators and mixers, grout pump operator, powderman and blaster, side rail setters, rail paved ditches, screw operators, tunnel laborers (free air), and water blasters:

**HEAVY & HIGHWAY** 

**BASE RATE** 

\$22.10

FRINGE BENEFITS 12.36

GROUP 4: Caisson workers (free air), cement finishers, environmental laborer – nuclear, radiation, toxic and hazardous waste – Level A and B, miners and drillers (free air), tunnel blasters, and tunnel mockers (free air), directional and horizontal boring, air track drillers (all types), powder man and blasters, troxler and concrete tester if laborer is utilized:

**HEAVY & HIGHWAY** 

BASE RATE

\$22,70

**FRINGE BENEFITS** 

12.36

#### **OPERATING ENGINEERS:**

#### Group A-1:

NCCCO or OECP Certified; Crane, dragline, hoist (1 drum when used for stack or chimney construction or repair), hoisting engineer (2 or more drums), orangepeel, overhead crane, piledriver, truck crane, tower crane, hydraulic crane:

BASE RATE

\$29.95

**FRINGE BENEFITS** 

14.15

Page 3 of 5

#### **CLASSIFICATIONS**

#### RATE AND FRINGE BENEFITS

#### **OPERATING ENGINEERS (CONTINUED):**

#### Group A:

Auto patrol, batcher plant, bituminous paver, cable-way, clamshell, concrete mixer (21 cu. ft. or over), concrete pump, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge engineer, elevator (regardless of ownership when used for hoisting any building material), elevating grader and all types of loaders, hoe-type machine, hoisting engine, locomotive, LeTourneau or carry-all scoop, bulldozer, mechanic, orangepeel bucket, piledriver, power blade, roller (bituminous), roller (earth), roller (rock), scarifier, shovel, tractor shovel, truck crane, well points, winch truck, push dozer, grout pump, high lift, fork lift (regardless of lift height), all types of boom cats, multiple operator, core drill, tow or push boat, A-Frame winch truck, concrete paver, gradeall, hoist, hyster, material pump, pumpcrete, ross carrier, sheepfoot, sideboom, throttle-valve man, rotary drill, power generator, mucking machine, rock spreader attached to equipment, scoopmobile, KeCal loader, tower cranes (French, German and other types), hydrocrane, tugger, backfiller gurries, self-propelled compactor, self-contained hydraulic percussion drill:

BASE RATE \$28.85 FRINGE BENEFITS 14.15

#### Group B:

All air compressors (200 cu. ft. per min. or greater capacity), bituminous mixer, concrete mixer (under 21 cu. ft.), welding machine, form grader, tractor (50 H.P. and over), bull float, finish machine, outboard motor boat, brakeman, mechanic helper, whirly oiler, tractair and road widening trencher, articulating trucks:

BASE RATE \$26.24 FRINGE BENEFITS 14.15

#### Group B2:

Greaser on grease facilities servicing heavy equipment:

BASE RATE \$26.65

FRINGE BENEFITS 14.15

#### Group C:

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw, burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver:

	BASE RATE FRINGE BENEFITS	\$25.95 14.15
PAINTERS: All Excluding Bridges:	BASE RATE FRINGE BENEFITS	\$19.92 9.57
Bridges:	BASE RATE FRINGE BENEFITS	\$23.92 10.07

Page CLASSIFICATIONS RATE AND FRINGE BENEFITS

PLUMBERS:	BASE RATE FRINGE BENEFITS	
SHEET METAL:	BASE RATE FRINGE BENEFITS	
TRUCK DRIVERS:		
Truck helper and warehouseman:	BASE RATE FRINGE BENEFITS	
Driver, winch truck and A-Frame when used in transporting materials:	BASE RATE FRINGE BENEFITS	
Driver, (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor:	BASE RATE FRINGE BENEFITS	\$23.40 14.50
Driver on mixer trucks (all types):	BASE RATE FRINGE BENEFITS	\$23.45 14.50
Truck mechanic:	BASE RATE FRINGE BENEFITS	
Driver (3 tons and under), tire changer and truck mechanic helper:	BASE RATE FRINGE BENEFITS	\$23.53 14.50
Driver on pavement breakers:	BASE RATE FRINGE BENEFITS	·
Driver (over 3 tons), driver (truck mounted rotary drill):	BASE RATE FRINGE BENEFITS	\$23.74 14.50
Driver, Euclid and other heavy earth moving equipment and Low Boy:	BASE RATE FRINGE BENEFITS	\$24.31 14.50
Greaser on greasing facilities:	BASE RATE FRINGE BENEFITS	\$24.40 14.50

#### Kentucky Determination No. CR-14-II-HWY dated July 14, 2014

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

These rates are listed pursuant to the Kentucky Determination No. CR-14-II-HWY dated July 14, 2014. Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contract or shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

#### TO: EMPLOYERS/EMPLOYEES

#### **PREVAILING WAGE SCHEDULE:**

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the numbers of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wage. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or to the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

#### NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Breathitt County.

#### NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

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Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Magoffin County.

## **PART IV**

## **INSURANCE**

#### **INSURANCE**

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
  - a) \$100,000 Each Accident Bodily Injury
  - b) \$500,000 Policy limit Bodily Injury by Disease
  - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
  - a) "policy contains no deductible clauses."
  - b) "policy contains \_\_\_\_\_ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

## PART V

## **BID ITEMS**

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#### **PROPOSAL BID ITEMS**

Report Date 5/6/15

#### Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0010	00001		DGA BASE	26.00	TON		\$	
0020	00212		CL2 ASPH BASE 1.00D PG64-22	25.00	TON		\$	
0030	00301		CL2 ASPH SURF 0.38D PG64-22	8.00	TON		\$	
0040	30072		BALLAST ROCK	1,725.00	TON		\$	
0050	30073		3/8 IN MINUS CRUSHER FINES	1,150.00	TON		\$	

#### Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0060	00464		CULVERT PIPE-24 IN	30.00	LF		\$	
0070	01002		PERFORATED PIPE-8 IN	3,500.00	LF		\$	
0800	01034		PERF PIPE HEADWALL TY 4-8 IN	4.00	EACH		\$	
0090	02237		DITCHING	1,000.00	LF		\$	
0100	02483		CHANNEL LINING CLASS II	50.00	TON		\$	
0110	02545		CLEARING AND GRUBBING (UNKNOWN ACREAGE)	1.00	LS		\$	
0120	02599		FABRIC-GEOTEXTILE TYPE IV	2,000.00	SQYD		\$	
0130	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0140	02726		STAKING	1.00	LS		\$	
0150	05950		EROSION CONTROL BLANKET	300.00	SQYD		\$	
0160	05985		SEEDING AND PROTECTION	10,000.00	SQYD		\$	
0170	06406		SBM ALUM SHEET SIGNS .080 IN	84.75	SQFT		\$	
0180	06410		STEEL POST TYPE 1	176.00	LF		\$	
0190	06517		PAVE STRIPING-PERM PAINT-12 IN	200.00	LF		\$	
0200	21341ND		BOLLARDS (GATE TYPE)	4.00	EACH		\$	
0210	21415ND		EROSION CONTROL	1.00	LS		\$	

#### Section: 0003 - LIGHTING

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	<b>AMOUNT</b>
0220	04761	LIGHTING CONTROL EQUIPMENT	1.00	EACH		\$	
0230	04791	CONDUIT-3/4 IN	384.00	LF		\$	
0240	04792	CONDUIT-1 IN	792.00	LF		\$	
0250	04810	<b>ELECTRICAL JUNCTION BOX</b>	10.00	EACH		\$	
0260	04820	TRENCHING AND BACKFILLING	100.00	LF		\$	
270	04832	WIRE-NO. 12	5,645.00	LF		\$	
280	04833	WIRE-NO. 8	6,100.00	LF		\$	
290	04871	POLE 35 FT WOODEN	1.00	EACH		\$	
300	04884	ANCHOR	1.00	EACH		\$	
310	21563NN	SPLICE BOX (8' X 6' 4')	10.00	EACH		\$	
0320	24750EC	LED TUNNEL LUMINAIRE	94.00	EACH		\$	
330	30082	MOTION SENSOR	10.00	EACH		\$	

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#### **PROPOSAL BID ITEMS**

Report Date 5/6/15

Section: 0004 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FΡ	<b>AMOUNT</b>
0340	04791		CONDUIT-3/4 IN	383.00	LF		\$	
0350	04792		CONDUIT-1 IN	792.00	LF		\$	
0360	04810		ELECTRICAL JUNCTION BOX	9.00	EACH		\$	
0370	04832		WIRE-NO. 12	5,645.00	LF		\$	
0380	04833		WIRE-NO. 8	6,100.00	LF		\$	
0390	21563NN		SPLICE BOX (8' X 6' X4')	10.00	EACH		\$	
0400	24750EC		LED TUNNEL LUMINAIRE	93.00	EACH		\$	
0410	30082		MOTION SENSOR	9.00	EACH		\$	

#### Section: 0005 - MISCELLANEOUS - TUNNEL (BREATHITT COUNTY)

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	<b>AMOUNT</b>
0420	30075		PORTAL CLEANING & SCALING (BREATHITT)	2,350.00	SQFT		\$	
0430	30076		TUNNEL INTERIOR PREPARATION (BREATHITT)	750.00	LF		\$	
0440	30077		ROCK DOWELS (7 FEET LONG, BREATHITT)	1,800.00	EACH		\$	
0450	30077		ROCK DOWELS (10 FEET LONG, BREATHITT)	200.00	EACH		\$	
0460	30078		WELDED WIRE FABRIC (BREATHITT)	45,000.00	SQFT		\$	
0470	30079		MINE STRAPS (BREATHITT)	50.00	EACH		\$	
0480	30080		TIMBER CANOPY (BREATHITT)	1.00	EACH		\$	
0490	30081		TUNNEL PATH SURFACING (BREATHITT)	850.00	LF		\$	

## Section: 0006 - MISCELLANEOUS - TUNNEL (MAGOFFIN)

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0500	30075	PORTAL CLEANING & SCALING (MAGOFFIN)	2,350.00	SQFT		\$	
0510	30076	TUNNEL INTERIOR PREPARATION (MAGOFFIN)	750.00	LF		\$	
0520	30077	ROCK DOWELS (7 FEET LONG, MAGOFFIN)	1,800.00	EACH		\$	
0530	30077	ROCK DOWELS (10 FEET LONG, MAGOFFIN)	200.00	EACH		\$	
0540	30078	WELDED WIRE FABRIC (MAGOFFIN)	45,000.00	SQFT		\$	
0550	30079	MINE STRAPS (MAGOFFIN)	50.00	EACH		\$	
0560	30080	TIMBER CANOPY (MAGOFFIN)	1.00	EACH		\$	
0570	30081	TUNNEL PATH SURFACING (MAGOFFIN)	850.00	LF		\$	

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#### **PROPOSAL BID ITEMS**

Report Date 5/6/15

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#### Section: 0007 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0580	02568		MOBILIZATION	1.00	LS		\$	
0590	02569		DEMOBILIZATION	1.00	LS		\$	